

Fwd: Fw: Burning Sea Turtles?]

**Subject:** [Fwd: Fw: Burning Sea Turtles?]

**From:** "Barbara.Schroeder" <Barbara.Schroeder@noaa.gov>

**Date:** Wed, 16 Jun 2010 11:13:56 -0400

**To:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Michael Ziccardi <mhziccardi@ucdavis.edu>, David Cottingham <David.Cottingham@noaa.gov>, Helen Golde <Helen.Golde@noaa.gov>, Teri Rowles <Teri.Rowles@noaa.gov>

I have been telling my agency for weeks about this.

----- Forwarded by Janet Mizzi/R4/FWS/DOI on 06/16/2010 11:01 AM -----

Gloria Bell/ARL/R9/FWS/DOI

06/16/2010 10:41 AM

To CHRISTOPHER LUCASH <[otterman@wildblue.net](mailto:otterman@wildblue.net)>

cc [janet\\_mizzi@fws.gov](mailto:janet_mizzi@fws.gov)

Subject Re: Burning Sea Turtles?[Link](#)

Thanks, Chris. I'm cc'ing Janet Mizzi in R4 so they can look into it.

Gloria Bell  
Deputy Assistant Director for Endangered Species  
U.S. Fish and Wildlife Service  
4401 N. Fairfax Drive, Room 420  
Arlington, VA 22203  
703/358-2171 office  
703/358-1941 direct  
571/730-8214 mobile  
703/358-1735 fax  
[gloria\\_bell@fws.gov](mailto:gloria_bell@fws.gov)

CHRISTOPHER LUCASH <[otterman@wildblue.net](mailto:otterman@wildblue.net)>

06/15/2010 07:58 PM

To [gloria\\_bell@fws.gov](mailto:gloria_bell@fws.gov)

cc

Subject Burning Sea Turtles?

Fwd: Fw: Burning Sea Turtles?]

Gloria,

I am sending this from home because I just found out. Please see the linked YouTube video and try to get to the bottom of it. My wife saw this and was in hysterics. I know much of the info out there is questionable, but the man interviewed seems intelligent, calm and believable.

[http://www.youtube.com/watch?v=4kjlw3\\_bMk8o](http://www.youtube.com/watch?v=4kjlw3_bMk8o)

Thank you,

Chris Lucash  
USFWS Red Wolf Biologist  
Manteo, NC

Re: Surface Burns

**Subject:** Re: Surface Burns

**From:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>

**Date:** Fri, 04 Jun 2010 08:20:07 -0400

**To:** Barbara Schroeder <Barbara.Schroeder@noaa.gov>

**CC:** Bob Hoffman <Bob.Hoffman@noaa.gov>, David Cottingham <David.Cottingham@noaa.gov>

Sounds good. It would be helpful if we let them know that the burns are part of a larger on-water cleanup that we just starting to understand. (There were no burns yesterday or today because of the weather). Cheers, A

PS. They are bringing another Big Gulp on line in 9 days. And the Big Gulp will start up in another day or less. We are asking that they archive all of their video. And evidently when the owner gets back from Mobile, he will bring over their latest download of video.

Barbara Schroeder wrote:

I was stuck on another call yesterday AM so was late to the call you had regarding cleanup operations. Were the surface burns discussed? What I heard after I was able to join was skimmer operations. Just to let you know, today I am setting up a meeting with Jim, Helen, David, and Angie (or whatever combination I can get of them) to ensure that they are all fully aware of what we now have extremely strong evidence to support -- that the surface burning operations are burning the same convergence materials (either naturally converged by wind and surface currents or partially or fully converged by booming or otherwise consolidating surface materials together) that we are finding turtles in. While we haven't collected many turtles, we have only looked in a miniscule portion of the converged materials. While the team on the water has not had time to analyze CPUE from this effort vs their normal research efforts, the sense is that the CPUE is even higher than what they have documented in other areas they have worked. There can be very little doubt, and there is no doubt in my mind, that significant numbers of turtles have, and will continue to be, burned alive in these surface burns. I want to ensure that my leadership is fully and completely aware of the information we have regarding the likely intersection of the burn activities and turtles in those surface habitats. I plan to send an email and discuss with them in person.

Barbara Schroeder  
National Sea Turtle Coordinator  
National Oceanic and Atmospheric Administration - NMFS

email: [barbara.schroeder@noaa.gov](mailto:barbara.schroeder@noaa.gov)  
Phone: 301-713-2322

To cherish what remains of the earth, and to foster its renewal, is our only legitimate hope. Wendell Berry





>>>>

>>>> Alexis Gutierrez wrote:

>>>>> Hi Helen,

>>>>> Per our conversation this morning, Donna Ward, BP Legal >>>>> requested information on the sea turtle on-water rescue and what >>>>> we know to date about the in-situ burn of sea turtles. I gave her >>>>> a rough background, as she did not understand why BP was even >>>>> being sued. I told her that my standing instructions were to refer >>>>> her to NOAA GC for specifics. She is seeking any reports of our >>>>> on-water rescue operations and to better understand the overlap of >>>>> sea turtles and oil in convergence zones. I said I would need to >>>>> speak with my superiors as to whether I could provide that >>>>> information as this straddled my role as a NMFS employee and being >>>>> part of the Unified Command.

>>>>> Thus, she is seeking a contact person in GC. Mark/Adam/Pam, I >>>>> don't know how you are coordinating with the region on this one. >>>>> Who should she talk to? Please let me know how to proceed. Thank >>>>> you! A

>>>>> >>>>> -----

>>>>>

>>>>> Subject:

>>>>> Turtle Information

>>>>> From:

>>>>> "Ward, Donna B" <[Donna.Ward@bp.com](mailto:Donna.Ward@bp.com)>

>>>>> Date:

>>>>> Wed, 30 Jun 2010 17:28:00 +0100

>>>>> To:

>>>>> [Alexis.Gutierrez@noaa.gov](mailto:Alexis.Gutierrez@noaa.gov)

>>>>>

>>>>> To:

>>>>> [Alexis.Gutierrez@noaa.gov](mailto:Alexis.Gutierrez@noaa.gov)

>>>>>

>>>>>

>>>>> Alexis,

>>>>>

>>>>> Thank you for your time this morning to provide more information >>>>> regarding turtle activity and impacts related to the MC252 >>>>> response. As we discussed, BP has received notice of a TRO and a >>>>> notice of intent to sue. We do not have information related to

>>>>> the turtle activity in connection with the response. It is my >>>>> understanding that you are working on the On Water Rescue >>>>> Operation and that your team has information related to response >>>>> activities.

>>>>>

>>>>> Please advise as to how I can contact the NOAA Counsel that you >>>>> work with to obtain additional information needed. My mobile >>>>> number is (713) 628-2331. Thank you.

>>>>>

>>>>> Donna

>>>>>

>>>>> Donna B. Ward

>>>>>

>>>>> Managing Attorney - HSSE Legal

>>>>> BP Legal | BP America Inc | 501 Westlake Park Blvd.

>>>>> MC 16.188 | Houston, TX 77079

>>>>> Office: 281.366.3537 | Fax: 281.366.7578

>>>>>

>>>>> \_donna.ward@bp.com\_ ◇

>>>>>

>>>>>

>>>> -- >>>> Helen M. Golde

>>>> Deputy Director

>>>> Office of Protected Resources

>>>> NOAA Fisheries Service

>>>> 301-713-2332 x 108

>>

>> -- >> Helen M. Golde

>> Deputy Director

>> Office of Protected Resources

>> NOAA Fisheries Service

>> 301-713-2332 x 108

-- Helen M. Golde

Deputy Director

Office of Protected Resources

NOAA Fisheries Service

301-713-2332 x 108

**Subject:** Surface Burns

**From:** Barbara Schroeder <Barbara.Schroeder@noaa.gov>

**Date:** Fri, 04 Jun 2010 07:08:06 -0400

**To:** Bob Hoffman <Bob.Hoffman@noaa.gov>, David Cottingham <David.Cottingham@noaa.gov>, Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>

I was stuck on another call yesterday AM so was late to the call you had regarding cleanup operations. Were the surface burns discussed? What I heard after I was able to join was skimmer operations. Just to let you know, today I am setting up a meeting with Jim, Helen, David, and Angie (or whatever combination I can get of them) to ensure that they are all fully aware of what we now have extremely strong evidence to support -- that the surface burning operations are burning the same convergence materials (either naturally converged by wind and surface currents or partially or fully converged by booming or otherwise consolidating surface materials together) that we are finding turtles in. While we haven't collected many turtles, we have only looked in a miniscule portion of the converged materials. While the team on the water has not had time to analyze CPUE from this effort vs their normal research efforts, the sense is that the CPUE is even higher than what they have documented in other areas they have worked. There can be very little doubt, and there is no doubt in my mind, that significant numbers of turtles have, and will continue to be, burned alive in these surface burns.

I want to ensure that my leadership is fully and completely aware of the information we have regarding the likely intersection of the burn activities and turtles in those surface habitats. I plan to send an email and discuss with them in person.

Barbara Schroeder  
National Sea Turtle Coordinator  
National Oceanic and Atmospheric Administration - NMFS

email: [barbara.schroeder@noaa.gov](mailto:barbara.schroeder@noaa.gov)  
Phone: 301-713-2322

To cherish what remains of the earth, and to foster its renewal, is our only legitimate hope.                      Wendell Berry



[Fwd: section 7 on Burns and skimmer use]

**Subject:** [Fwd: section 7 on Burns and skimmer use]

**From:** Barbara Schroeder <Barbara.Schroeder@noaa.gov>

**Date:** Tue, 15 Jun 2010 12:25:37 -0400

**To:** Helen Golde <Helen.Golde@noaa.gov>, David Cottingham <David.Cottingham@noaa.gov>, "teri.rowles@noaa.gov" <Teri.Rowles@noaa.gov>

----- Original Message -----

**Subject:** section 7 on Burns and skimmer use

**Date:** Tue, 15 Jun 2010 11:29:26 -0400

**From:** Robert Hoffman <Robert.Hoffman@noaa.gov>

**To:** Charlie Henry <Charlie.Henry@noaa.gov>, Lisa Symons <Lisa.Symons@noaa.gov>

**CC:** holly herod@fws.gov, Jessica Powell <Jessica.Powell@noaa.gov>, Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>, David Bernhart <David.Bernhart@noaa.gov>, Kyle Baker <Kyle.Baker@noaa.gov>, Calusa Horn <Calusa.Horn@noaa.gov>, Karla Reece <Karla.Reece@noaa.gov>

As you are the Coast Guard's (USCG) designated federal representatives for of the ongoing emergency section 7 consultation (50 CFR 402.05) with the USCG on the response to the Deep Horizon oil spill I wanted to ensure you are aware of the effects on listed species as a result of the above referenced activities.

The use of In-situ burns and skimmers are important aspect of the response actions; however, they adversely affect sea turtles and marine mammals. The areas targeted for burning are the same type of areas targeted by our turtle rescue teams. As such there are undoubtedly a number of sea turtles being burned alive during each in-situ burn. Skimming operations have two documented takes of sea turtles; however, we believe there could be many more undocumented takes. To minimize the effects on listed species under NMFS jurisdiction we offer the attached best management plans. Please keep us apprised if and when these are implemented. Please keep in mind that minimization of effects and monitoring of effects are required by section 7 of the ESA.

Barbara Schroeder  
National Sea Turtle Coordinator  
National Oceanic and Atmospheric Administration - NMFS

email: [barbara.schroeder@noaa.gov](mailto:barbara.schroeder@noaa.gov)  
Phone: 301-713-2322

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BMPs Oil Spill.doc

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attachment 1.docx

Content-Type: application/vnd.openxmlformats-officedocument.wordprocessingml.document

Content-Encoding: base64



## **BEST MANAGEMENT PRACTICES TO PROTECT SEA TURTLES AND MARINE MAMMALS**

### **Skimmer Operations:**

#### **Sea Turtles**

- Use of oil skimmers can adversely affect sea turtles through possible capture and/or entrapment.

#### **Best Management Practices To Reduce Skimmer Impacts to Sea Turtles**

- Collection of all live and dead turtles needs to be conducted according to the attached protocols (attachment 1).
- The best possible mitigative measure would be to have turtle rescue vessels (with trained rescue personnel, if available) accompany selected skimming task forces to search the material to be skimmed and collect all turtles found in the area, before skimming operation begins. If this is not possible then the following should be considered:
  - o Have a trained observer (if available) or a crew member dedicated to looking for sea turtles (and marine mammals) during skimming operations and record each sighting event, including GPS location, species (if known), description of encounter on the attached form (attachment 2).
  - o If possible and if the skimming platform allows (i.e. size of vessel) and there is no risk to human safety collect live and dead sea turtles according to attachment 1.
  - o Contact the Wildlife Hotline (866-557-1401) or your supervisor to report the turtle to the Wildlife Branch immediately.
  - o If possible all Sargassum that is not-oiled or is only very lightly oiled should be avoided.

#### **Marine Mammals:**

- Use of oil skimmers can adversely affect marine mammals through possible capture and/or entrapment.

#### **Best Management Practices To Reduce Skimmer Impacts to Marine Mammals**

- Have a trained observer, if available, or a crew member dedicated to looking for marine mammals that maybe affected by equipment or are impacted by oil.
- Contact the Wildlife Hotline (866-557-1401) or your supervisor to report any marine mammal that is impacted by skimming operations or that has signs of oil impacts to the Wildlife Branch as quickly as possible.
- If possible avoid skimming operations where marine mammals have been spotted, if a marine mammal is spotted during operations, if possible, stop operations until the animal is outside the operations area.

## **In-Situ Burning (Offshore):**

### **Sea Turtles**

- Sea turtles can be adversely affected during corralling of oil and oiled Sargassum or other converged material by being herded by the booms into oil, turtles may also be in the oil already whether or not there is Sargassum present. Any live turtles in the boomed oil and/or oiled Sargassum or other converged material will be burned alive when the oil is ignited

### **Best Management Practices to Reduce In-Situ Burns Impacts to Sea Turtles**

- Collection of all live and dead turtles needs to be conducted according to the attached protocols (attachment 1).
- The best possible mitigative measure would be to have turtle rescue vessels (with trained rescue personnel, if available) accompany the burn taskforce into the burn box and to search all material to rescue turtles prior to burning, while oil is being boomed or otherwise is awaiting burning. If this is not possible then the following should be considered:
  - o Send turtle rescue vessels (with trained rescue personnel, if available) into the next day's projected burn box to search for and rescue turtles. Feasibility will depend on the size of the projected area and whether material has already been boomed or otherwise collected.
  - o Have a trained observer (if available) or a crew member dedicated to looking for sea turtles (and marine mammals) during corralling operations and record each sighting event, including GPS location, species (if known), description of encounter on the attached form (attachment 2).
  - o Contact the Wildlife Hotline (866-557-1401) or your supervisor to report the turtle to the Wildlife Branch immediately.
  - o If possible all Sargassum that is not-oiled or is only very lightly oiled should be avoided.
  - o If possible a survey should be conducted in the burn area after the burn is complete and all dead sea turtles should be counted and if possible collected.

### **Marine Mammals:**

- Marine mammals can be adversely affected by in-situ burns if they are in the burn area during burning. It is expected that marine mammals will avoid the area once the oil is ignited.

### **Best Management Practices to Reduce In-Situ Burns Impacts to Marine Mammals**

- Have a trained observer, if available, or a crew member dedicated to looking for marine mammals that maybe affected by the burn or are impacted by oil.



- Contact the Wildlife Hotline (866-557-1401) or your supervisor to report any marine mammal that is impacted by burn operations or that has signs of oil impacts to the Wildlife Branch as quickly as possible.
- If possible avoid burn operations where marine mammals have been spotted, if a marine mammal is spotted during operations, if possible, stop operations until the animal is outside the operations area.



**Subject:** Re: [Fwd: Re: Summary of Congressional Staff Conference Call on the Gulf of Mexico Oil Spill - June 16, 2010]

**From:** Barbara Schroeder <Barbara.Schroeder@noaa.gov>

**Date:** Thu, 17 Jun 2010 10:48:00 -0400

**To:** Helen Golde <Helen.Golde@noaa.gov>

**CC:** David Cottingham <David.Cottingham@noaa.gov>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>, Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>

There appear to be two questions, based on all of the email traffic on this, one about the directed turtle survey effort and one about the turtles being burned up. I do not know what Brian Pawlak means by "*we are probably going to need a politic answer on this..*" with regard to the question "Has wildlife been impacted by in situ burns?" The answer is straightforward -- yes. Draft responses to both questions are attached.

Barbara Schroeder  
National Sea Turtle Coordinator  
National Oceanic and Atmospheric Administration - NMFS

email: [barbara.schroeder@noaa.gov](mailto:barbara.schroeder@noaa.gov)  
Phone: 301-713-2322

To cherish what remains of the earth, and to foster its renewal, is our only legitimate hope. Wendell Berry

Helen Golde wrote:

Here is he same question from Nelson's staff that came on a call today.

----- Original Message -----

**Subject:** Re: Summary of Congressional Staff Conference Call on the Gulf of Mexico Oil Spill - June 16, 2010

**Date:** Wed, 16 Jun 2010 19:13:09 -0400

**From:** Brian Pawlak <Brian.T.Pawlak@noaa.gov>

**To:** Helen Golde <Helen.Golde@noaa.gov>

**CC:** rebecca.holyoke <Rebecca.Holyoke@noaa.gov>, Michael Jarvis <Michael.Jarvis@noaa.gov>

**References:** <4C19559B.8080008@noaa.gov> <4C19564D.500@noaa.gov>  
<4C1956B2.8040502@noaa.gov> <4C195A17.2040809@noaa.gov>

Helen - we are probably going to need a politic answer on this..

rebecca.holyoke wrote:

Staff from Sen. Bill Nelson's (D-FL) office asked this question. Jeff Underwood from USFWS said that he did not have any information on this at this time, but that he would look into it. He



asked if the staffer was asking about it because of the recent CNN report. NOAA did not comment on this question or Jeff's remarks. The only mention of NOAA came by the staffer who said (during her question) that she knew NOAA had guidelines on this.

Michael Jarvis wrote:

Becky Holoyoke in my office handled today's call for me. It was my understanding from her that USFWS answered that particular question. Becky, do you remember what was said for this question?

Brian Pawlak wrote:

What was our response to the question Has wildlife been impacted by in situ burns?

Michael Jarvis wrote:

*For internal use only*

**Summary of Congressional Staff Conference Call on the Gulf of Mexico Oil Spill**

**June 16, 2010**

**3:00pm – 3:20pm**

**Facilitator**

Christopher Mansour, DOI Congressional and Legislative Affairs Director

**Speakers/Agency Representatives Included**

Capt. Lincoln Stroh, USCG Commander of Coast Guard Sector New Orleans

Walter Cruickshank, MMS Deputy Director

Doug Helton, NOAA OR&R Incident Operations Coordinator

Dana Tulis, EPA Office of Emergency Management

Jeff Underwood, Acting Deputy Director, US FWS

**Congressional Participants Included (Not all participants were announced)**

Staff with Senate Commerce Committee

Staff with House Homeland Security

Staff with Senator Bill Nelson (D-FL)

Staff with Senator Roger Wicker (R-MS)

**Remarks from Capt. Lincoln Stroh**

- 10,448 barrels were recovered yesterday. The number of barrels was less than the typical >15,000 since Enterprise was shut down temporarily after a lightning strike. Enterprise got back online last evening.

- 11,891 barrels were recovered yesterday during skimming operations, for a total of 504,590 barrels

- Current depth of relief well DD2: 2,978 ft (4,560 ft below sea floor and



continuing to drill)

- Current depth of relief well DD3: 9,967 ft
- 6 successful in situ burns yesterday; ~ 4,300 barrels
- 66,158 claims submitted to date, for a total of \$81,355,154
- Winds currently out of the south at 4-6 knots; winds expected to continue out of the SSW at 5-8 knots and increasing to upwards of 9 knots on Friday.
- Loop Current was said to be cooperating; mentioned a large clockwise eddy to the north.

**Remarks from Walter Cruickshank**

- 25.1M cubic feet of gas recovered in 24 hour period; numbers down from 31-32M cubic feet because of temporary shutdown
- Would like to reduce the plume coming out (but without letting seawater get into tophat)

**Remarks from Doug Helton**

- Fish closure was increased today to include 33% of the Gulf (rather than 32%); coordinates of closure available to those interested
- The low pressure system mentioned yesterday has been downgraded in terms of its potential to form into a tropical cyclone.

**Remarks from Christopher Mansour**

- BP will contribute \$20B over a 4-year period into an escrow account for individuals and businesses harmed by the oil spill. The first \$5B will be contributed this year, and no ceiling is expected on this account. The funds will be managed by Kenneth Steinburg – managers of the 09/11 account.
- Additionally, BP is expected to contribute to a Foundation for unemployed oil rig workers.

**Questions Raised by Congressional Members and Staff**

Is there a timeline for when the new claims process will be put into process? Will constituents who have already filed be required to file again? Are there any privacy concerns?

Could you repeat the number of claims and funds dispersed thus far? How many claims have yet to be processed?

Will BP and/or the government be involved in the administration of the \$20B escrow account?

Were the numbers provided earlier for aerial and subsea dispersants in gallons (rather than barrels)?

Could you repeat the statistics for the top-hat recovery again?

Has US FWS been able to answer a previous get back regarding which non-dolphin mammals have been affected by the spill?

Has wildlife been impacted by in situ burns?

What steps are EPA taking towards onshore impacts?





There were no getbacks for NOAA.

--

Michael G. Jarvis  
Congressional Affairs Specialist  
Office of Legislative and Intergovernmental Affairs  
National Oceanic and Atmospheric Administration  
1401 Constitution Ave. NW, Room 5224  
Washington, DC 20230  
E-mail: [michael.jarvis@noaa.gov](mailto:michael.jarvis@noaa.gov)  
Office: 202-482-3595

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Brian Pawlak  
Deputy Director  
NOAA Fisheries Service  
Office of Habitat Conservation  
301-713-2325 (167)  
301-713-1043 (Fax)

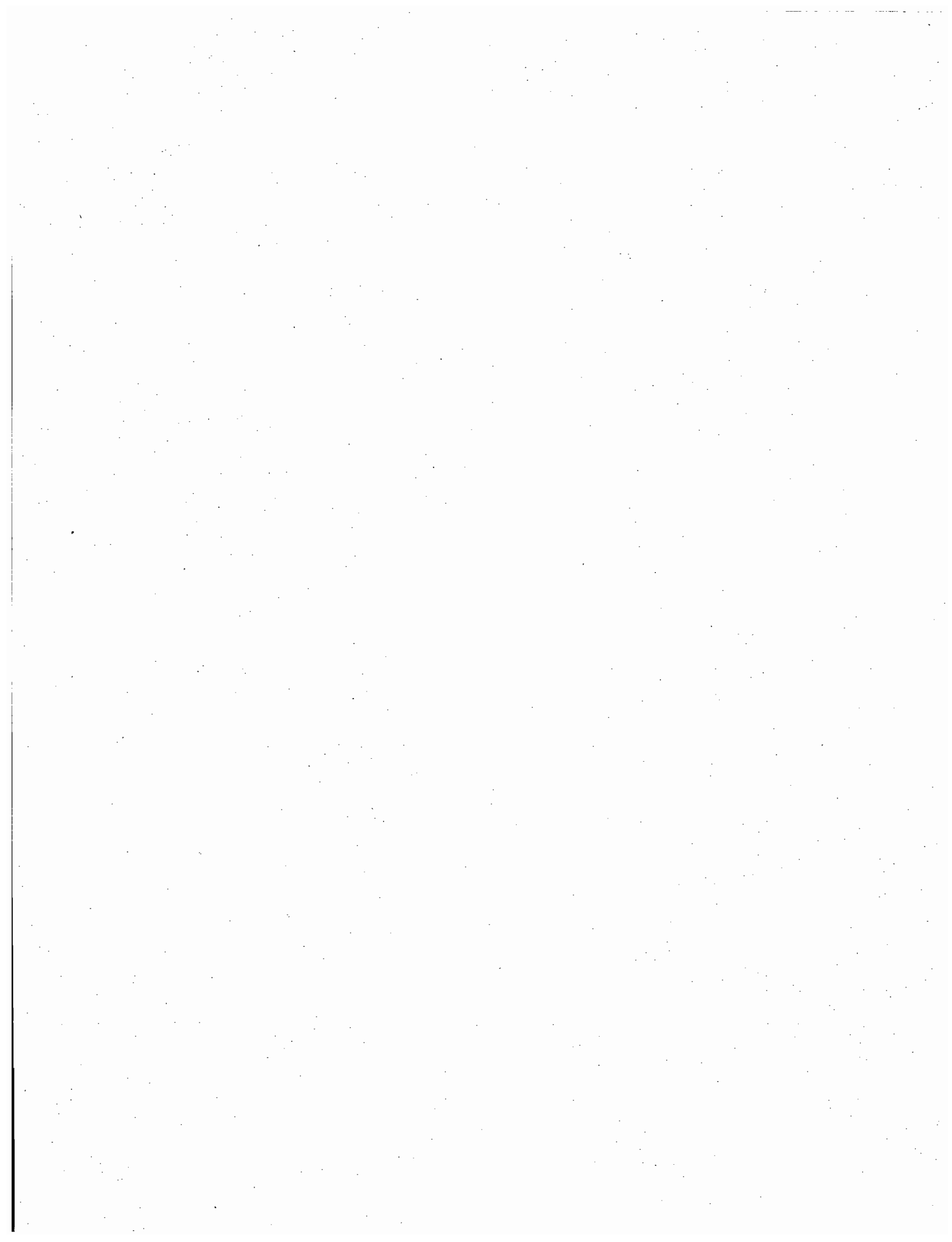
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1401 Constitution Ave. NW, Room 5224  
Washington, DC 20230  
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Office: 202-482-3595

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Rebecca R. Holyoke, Ph.D.  
Congressional Affairs Specialist  
Office of Legislative and Intergovernmental Affairs  
National Oceanic and Atmospheric Administration  
1401 Constitution Avenue, NW (Room 5224)  
Washington, D.C. 20230

Office: (202) 482-3596  
Cell: (240) 723-6319  
Fax: (202) 482-4960  
Email: [Rebecca.Holyoke@noaa.gov](mailto:Rebecca.Holyoke@noaa.gov)



Re: [Fwd: Re: Summary of Congressional Staff Conference Call on th...

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Brian Pawlak  
Deputy Director  
NOAA Fisheries Service  
Office of Habitat Conservation  
301-713-2325 (167)  
301-713-1043 (Fax)

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Re: JIC Turtles/controlled burn

**Subject:** Re: JIC Turtles/controlled burn

**From:** Barbara Schroeder <Barbara.Schroeder@noaa.gov>

**Date:** Mon, 21 Jun 2010 09:41:22 -0400

**To:** tfrady@mercury.wh.who.edu

**CC:** David.Cottingham@noaa.gov, Kyle.Baker@noaa.gov, mhziccardi@ucdavis.edu, Sara.McNulty@noaa.gov, Connie.Barclay@noaa.gov, Joseph.J.Dillon@noaa.gov, John.Ewald@noaa.gov, Monica.Allen@noaa.gov

comments attached on the press release, I will send comments on the Q&A's shortly

Barbara Schroeder  
National Sea Turtle Coordinator  
National Oceanic and Atmospheric Administration - NMFS

email: [barbara.schroeder@noaa.gov](mailto:barbara.schroeder@noaa.gov)  
Phone: 301-713-2322

To cherish what remains of the earth, and to foster its renewal, is our only legitimate hope.  
Wendell Berry

tfrady@mercury.wh.who.edu wrote:

Hi All: attached, revised draft news release and talking points on subject issue. Once we are agreed on the technical side about the text I submit to NOAA/DOC/Houma JIC PA for policy clearance.

Keep in mind that we are trying to get in front of stories about the likelihood that wildlife has been harmed during controlled burn operations. We need to clearly explain what has been done and why, and it's also an opportunity to explain the larger survey & protection effort.

The news hook is the pilot program adding turtle monitors/capture staff to burn unit ops. The talking points are for internal use and anticipate the kinds of questions reporters are likely to ask. Additions appreciated as well as your comments and corrections.

The sooner we can get these cleared and out, the less likely we are to be without a cogent response when stories are in development.

Send comments to me and I will aggregate into the next revision.

Thanks all, especially to those of you who worked on this today (Sunday and Father's Day!)

NRTurtle2-JD bas.docx

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Fwd: Re: On-water turtle ops]

Subject: [Fwd: Re: On-water turtle ops]  
From: Barbara Schroeder <Barbara.Schroeder@noaa.gov>  
Date: Wed, 23 Jun 2010 15:46:10 -0400  
To: Helen Golde <Helen.Golde@noaa.gov>, David Cottingham <David.Cottingham@noaa.gov>

My response for you attached. I forgot to add the on-water vessel to today's daily. It will be in tonight's/tomorrow.

----- Original Message -----

Subject: Re: On-water turtle ops  
Date: Wed, 23 Jun 2010 15:21:43 -0400  
From: Samuel Rauch <Samuel.Rauch@noaa.gov>  
To: Helen.Golde@noaa.gov <Helen.Golde@noaa.gov>, 'John.Oliver@noaa.gov' <John.Oliver@noaa.gov>, 'Samuel.Rauch@noaa.gov' <Samuel.Rauch@noaa.gov>, 'steve.murawski@noaa.gov' <Steve.Murawski@noaa.gov>  
CC: David.Cottingham@noaa.gov <David.Cottingham@noaa.gov>, Barbara.Schroeder@noaa.gov <Barbara.Schroeder@noaa.gov>

Thanks, a couple of questions:

In terms of resuming on water ops, what does as soon as possible mean. There are a lot of caveats in that paragraph which indicate it may be a while. Also how many burn operations are there. I understand we are going to work with one and evaluate scaling up but can you give me a sense as to what

----- Original Message -----

From: Helen Golde <Helen.Golde@noaa.gov>  
To: John Oliver <John.Oliver@noaa.gov>; Samuel Rauch <Samuel.Rauch@noaa.gov>; Steve Murawski <Steve.Murawski@noaa.gov>  
Cc: David Cottingham <David.Cottingham@noaa.gov>; Barbara Schroeder <Barbara.Schroeder@noaa.gov>  
Sent: Wed Jun 23 14:52:58 2010  
Subject: On-water turtle ops

Attached is the summary of plans for resumption and possible expansion of on-water turtle ops. It appears that this didn't get up to you previously.

-- Helen

--  
Helen M. Golde  
Deputy Director  
Office of Protected Resources  
NOAA Fisheries Service  
301-713-2332 x 108

--  
Barbara Schroeder  
National Sea Turtle Coordinator  
National Oceanic and Atmospheric Administration - NMFS

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## Lawsuit Launched to Force BP to Stop Burning of Sea Turtles Alive

Killing of Sea Turtles in "Burn Boxes" Violates Endangered Species Act  
[cid:image002.jpg@01CB1764.478DE0C0]<<http://www.seaturtles.org/img/original/Kemp%20Ri>

SAN FRANCISCO" The Center for Biological Diversity and Turtle Island Restoration Network today officially notified BP and the U.S. Coast Guard of their intent to sue to stop the burning alive of endangered sea turtles in the chaotic clean-up efforts in the Gulf of Mexico. The 60-day notice letter is a first step to filing a lawsuit under the Endangered Species Act. Download PDF of letter. <<http://www.seaturtles.org/downloads/TurtleBurnNOIwCBD6.pdf>>

"BP is burning turtles alive and it is cruel, heartless and a crime we cannot and won't allow to continue," said Todd Steiner, biologist and executive director of Turtle Island Restoration Network (TIRN). "Sea turtles were critically endangered before BP created America's worst environmental catastrophe, and every effort possible must be taken to rescue endangered turtles from this oil spill. BP needs to reverse course and help double our efforts to rescue sea turtles, not prevent their recovery."

The spill occurred as rare Kemp's ridley sea turtles started nesting in the Gulf of Mexico. Several females have been tracked directly to the oil spill. Millions of hatchlings are racing to the sea now from nests in the Gulf of Mexico and are likely to face oiled waters as they seek out Gulf currents.

"Kemp's ridleys have struggled back from near extinction; they deserve more than dying in purposefully set oil fires," said Carole Allen, Gulf Director and TIRN board member.

Turtle Island Restoration Network sounded the alarm about sea turtles being burned alive after a boat captain who had been rescuing sea turtles reported that BP started a burn operation before the rescue crew could survey the area and rescue the turtles. Since then the Obama administration has confirmed the burning of sea turtles by BP crews. BP is using "controlled burns" in an attempt to contain the spill. Boats create a corral of oil by dragging together fire-resistant booms and then lighting the enclosed "burn box" on fire. If turtles are not removed from the area before the fire is lit, they are burned alive.

"The spill was tragically timed for sea turtles that are nesting in the Gulf right now," said Miyoko Sakashita, oceans director for the Center. "Newly hatched sea turtles are swimming out to sea and finding themselves in a mucky, oily mess. News that BP has blocked efforts to rescue trapped sea turtles before they're burned alive in controlled burns is unacceptable."

Today's notice letter puts BP and federal agencies involved in the Deepwater Horizon response on official notice that their practices in the Gulf are resulting in the illegal and deeply inhumane deaths of threatened and endangered species, particularly the Kemp's ridley sea turtle. The letter asks BP and the Coast Guard to place qualified observers in the Gulf of Mexico who can survey for, and rescue, endangered turtles and other wildlife.

As of today at least 429 sea turtles have been collected dead in the Gulf area since the oil spill due to oiled waters as well as capture in shrimp trawls. Many more have likely been injured or killed but not found. In addition to the Kemp's ridley, four other endangered sea turtle species are found in the Gulf of Mexico: greens, loggerheads, hawksbills and leatherbacks. They rely on areas throughout the Gulf of Mexico for

w: [Fwd: FW: BP Turtle Burning Lawsuit to be Filed]

**Subject:** Fw: [Fwd: FW: BP Turtle Burning Lawsuit to be Filed]

**From:** Barbara Schroeder <Barbara.Schroeder@noaa.gov>

**Date:** Tue, 29 Jun 2010 13:21:05 -0400

**To:** "Alexis.Gutierrez@noaa.gov" <Alexis.Gutierrez@noaa.gov>, "Teri.Rowles@noaa.gov" <Teri.Rowles@noaa.gov>, "mhziccardi@ucdavis.edu" <mhziccardi@ucdavis.edu>, "David.Cottingham@noaa.gov" <David.Cottingham@noaa.gov>, "Helen.Golde@noaa.gov" <Helen.Golde@noaa.gov>

----- Original Message -----

**From:** tfrady@mercury.wh.who.edu <tfrady@mercury.wh.who.edu>

**To:** Scott.Smullen@noaa.gov <Scott.Smullen@noaa.gov>; christine.patrick@noaa.gov <christine.patrick@noaa.gov>; connie.barclay@noaa.gov <connie.barclay@noaa.gov>; jennifer.austin@noaa.gov <jennifer.austin@noaa.gov>; justin.kenney@noaa.gov <justin.kenney@noaa.gov>; Monica.Allen@noaa.gov <Monica.Allen@noaa.gov>; teri.rowles@noaa.gov <teri.rowles@noaa.gov>

**Cc:** barbara.schroeder@noaa.gov <barbara.schroeder@noaa.gov>; david.cottingham@noaa.gov <david.cottingham@noaa.gov>; joseph.j.dillon@noaa.gov <joseph.j.dillon@noaa.gov>; KGriffis@doc.gov <KGriffis@doc.gov>; mhziccardi@ucdavis.edu <mhziccardi@ucdavis.edu>

**Sent:** Tue Jun 29 12:56:48 2010

**Subject:** [Fwd: FW: BP Turtle Burning Lawsuit to be Filed]

FYI

----- Original Message -----

**Subject:** FW: BP Turtle Burning Lawsuit to be Filed

**From:** "Coulon, Chris - Columbus, OH" <Chris.Coulon@oh.usda.gov>

**Date:** Tue, June 29, 2010 12:43 pm

**To:** "david.p.miller@noaa.gov" <David.P.Miller@noaa.gov>

Regarding AP inquiry, background info.

**From:** Flesher, John [mailto:jflesher@ap.org]

**Sent:** Tuesday, June 29, 2010 12:41 PM

**To:** Coulon, Chris - Columbus, OH

**Subject:** FW: BP Turtle Burning Lawsuit to be Filed

**From:** Kunzelman, Michael

**Sent:** Tuesday, June 29, 2010 11:25 AM

**To:** News - South Desk Oil Rig

**Subject:** Fw: BP Turtle Burning Lawsuit to be Filed

**From:** Sea Turtle Restoration Project <tshore@tirn.net>

**To:** 'Teri Shore' <tshore@tirn.net>

**Sent:** Tue Jun 29 11:24:32 2010

**Subject:** BP Turtle Burning Lawsuit to be Filed

**For Immediate Release:** June 29th, 2010

**Contact:**

Todd Steiner, Turtle Island Restoration Network (TIRN), (415) 663-8590 x 103 tsteiner@tirn.net <mailto:tsteiner@tirn.net>

Carole Allen, 281-444-6204, Gulf Director, (TIRN), Houston, Texas, carole@seaturtles.org <mailto:carole@seaturtles.org>

Miyoko Sakashita, Center for Biological Diversity miyoko@biologicaldiversity.org <mailto:miyoko@biologicaldiversity.org> (415) 658-5308

nesting, reproduction, feeding and migration. All of these turtles are at risk from poisoning from oil and careless controlled burns.

###

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Teri Shore  
Program Director  
TURTLE ISLAND RESTORATION NETWORK  
Check out our blog <http://blog.seaturtles.org/>  
[tshore@tirn.net](mailto:tshore@tirn.net)<<mailto:tshore@tirn.net>>  
PH. 415 663-8590, ext. 104  
\* Mobile 707-583-4428 \*  
Mail: PO Box 370, Forest Knolls, CA 94933 USA  
Location: 9255 Sir Francis Drake Blvd, Olema, CA 94950  
Visit our WEB sites:  
<http://www.seaturtles.org><<http://www.seaturtles.org/>>  
<http://www.gotmercury.org><<http://www.gotmercury.org/>>  
<http://www.SpawnUSA.org><<http://www.spawnusa.org/>>

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[IP\_US\_DISC]

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**Subject:** BP Turtle Burning Lawsuit to be Filed

For Immediate Release: June 29th, 2010

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Carole Allen, 281-444-6204, Gulf Director, (TIRN), Houston, Texas, [carole@seaturtles.org](mailto:carole@seaturtles.org)  
Miyoko Sakashita, Center for Biological Diversity [miyoko@biologicaldiversity.org](mailto:miyoko@biologicaldiversity.org) (415) 658-5308

<http://www.seaturtles.org/img/spacer.gif>

## **Lawsuit Launched to Force BP to Stop Burning of Sea Turtles Alive**

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<http://www.seaturtles.org/img/pic>

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###

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**Teri Shore**

**Program Director**

**TURTLE ISLAND RESTORATION NETWORK**

Check out our blog <http://blog.seaturtles.org/>

[tshore@tirn.net](mailto:tshore@tirn.net)

PH. 415 663-8590, ext. 104

\* Mobile 707-583-4428 \*

Mail: PO Box 370, Forest Knolls, CA 94933 USA

Location: 9255 Sir Francis Drake Blvd, Olema, CA 94950

Visit our WEB sites:

<http://www.seaturtles.org>

<http://www.gotmercury.org>

<http://www.SpawnUSA.org>

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w: [Fwd: FW: BP Turtle Burning Lawsuit to be Filed]

and delete this e-mail. Thank you.  
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msk\_dccc60c6d2c3a6438f0cf467d9a4938



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	<b>Content-Encoding:</b> base64

image002.jpg	<b>Content-Description:</b> image002.jpg
	<b>Content-Type:</b> image/jpeg
	<b>Content-Encoding:</b> base64

Re: Fwd: Rumors of sea turtles being incinerated during in-situ burns

**Subject:** Re: Fwd: Rumors of sea turtles being incinerated during in-situ burns  
**From:** "Barbara.Schroeder" <Barbara.Schroeder@noaa.gov>  
**Date:** Sun, 20 Jun 2010 13:50:09 -0400  
**To:** David Cottingham <David.Cottingham@noaa.gov>  
**CC:** "tfrady@mercury.wh.who.edu" <tfrady@mercury.wh.who.edu>

Sorry, I don't understand what the question is here. The report Teri links to is the 2003 report authored by Gary Shigenaka on oil and sea turtles.

David Cottingham wrote:

Thanx. I'm not aware of the report

BAS, are you?

----- Original Message -----

From: [tfrady@mercury.wh.who.edu](mailto:tfrady@mercury.wh.who.edu) <[tfrady@mercury.wh.who.edu](mailto:tfrady@mercury.wh.who.edu)>  
To: [david.cottingham@noaa.gov](mailto:david.cottingham@noaa.gov) <[david.cottingham@noaa.gov](mailto:david.cottingham@noaa.gov)>  
Sent: Sun Jun 20 12:10:04 2010  
Subject: Fwd: Rumors of sea turtles being incinerated during in-situ burns

Hi D.: The NOAA sea turtle response referred to below is here:  
[http://response.restoration.noaa.gov/book\\_shelf/35\\_turtle\\_complete.pdf](http://response.restoration.noaa.gov/book_shelf/35_turtle_complete.pdf)

----- Original Message -----

Subject: Fwd: Rumors of sea turtles being incinerated during in-situ burns  
From: "Michael Ziccardi" <[mhziccardi@ucdavis.edu](mailto:mhziccardi@ucdavis.edu)>  
Date: Sun, June 20, 2010 7:56 am  
To: "Teri Frady" <[Teri.Frady@noaa.gov](mailto:Teri.Frady@noaa.gov)>  
Cc: "connie.barclay@noaa.gov Barclay" <[Connie.Barclay@noaa.gov](mailto:Connie.Barclay@noaa.gov)>  
"Monica Allen" <[Monica.Allen@noaa.gov](mailto:Monica.Allen@noaa.gov)>

Hi Teri-

As you have been working on the presser, would it be best to have you comment on this from NOAA? Or would you prefer me to? Thx.

Mike

Begin forwarded message:

From: "Jennifer Phillips" <[jphillips@motherjones.com](mailto:jphillips@motherjones.com)>  
Date: June 18, 2010 1:12:16 PM CDT  
To: <[mhziccardi@ucdavis.edu](mailto:mhziccardi@ucdavis.edu)>  
Subject: Rumors of sea turtles being incinerated during in-situ burns

Hi Dr. Ziccardi. I recently saw this video (below) of an interview with

a boat captain who suggests that turtles (especially Kemp's Ridleys) are being burned alive as part of an in-situ burn. I was wondering if you knew if there was any validity to this statement? I read a chapter of NOAA's "Oil and Sea Turtles: Biology, Planning, and Response Report" in which it was written that depending on the circumstances, an in-situ burning (even if it did kill some turtles) might be the better of two options considering "the impacts of prolonged or heavy exposure to



Re: Fwd: Rumors of sea turtles being incinerated during in-situ burns

untreated surface oil."

So I guess I really have two questions here: 1) do you know if the

in-situ burn(s) in the Gulf included turtles, or if there were measures to ensure this didn't happen, and 2) right now, with the huge amount of oil, is an in-situ burn less harmful to wildlife in the long-run than letting the oil remain? Any light you can shed on this matter is much appreciated. Yours, Jen Phillips

[http://www.youtube.com/watch?v=4kfw3\\_bMk8o](http://www.youtube.com/watch?v=4kfw3_bMk8o)

--

Jen Phillips  
Assistant Editor  
Mother Jones magazine  
222 Sutter Street, Suite 600  
San Francisco, CA 94108  
Phone: 415-321-1726 direct  
Fax: 415-321-1772  
Web: <http://www.motherjones.com>  
Twitter: the\_hip\_hapa

\*\*Mother Jones won the 2010 National Magazine Award for general

excellence\*\*

\*\*\*\*\*  
Michael Ziccardi DVM MPVM PhD  
Director, Oiled Wildlife Care Network  
Assoc. Professor, Clinical Wildlife Health  
Wildlife Health Center  
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Davis, CA 95616  
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E: [mhziccardi@ucdavis.edu](mailto:mhziccardi@ucdavis.edu)  
[www.owcn.org](http://www.owcn.org)

Re: report on today's meeting

**Subject:** Re: report on today's meeting

**From:** Barbara.Schroeder@noaa.gov

**Date:** Tue, 08 Jun 2010 22:03:31 -0500

**To:** David Cottingham <David.Cottingham@noaa.gov>, Jim.Lecky@noaa.gov, Helen.Golde@noaa.gov

**CC:** Alexis.Gutierrez@noaa.gov, sandy\_macpherson@fws.gov, mhziccardi@ucdavis.edu

Hi, we had a long but productive meeting and agreed on recommended ways forward on several fronts. Below is a very quick summary of key outcomes, a full report will be completed in the next few days.

On-water search/rescue: maintain current level of effort; pursue authorization to access burn box; pursue authorization to imbed search/rescue vessel within skimmer task force and trial this activity; continue dedicated air support and increase if possible; investigate neritic habitats as directed by aerial and ground information on oiling/convergence areas; establish permanent full-time ground support coordinator for on-water search/rescue; address unresolved logistic issues regarding long-term housing for search/rescue teams; expansion not currently recommended until trial effort with skimmer task force and burn box operations can be assessed and outstanding logistic issues are resolved

Rehabilitation/release issues: activate identified secondary facilities for longer term holding of turtles following de-oiling and stabilization to ensure primary de-oiling and triage facilities have sufficient capacity; release location of de-oiled rehab turtles to be made at later date dependent on oil projections/conditions (none of these turtles are anticipated to be ready for release in the immediate future)

Hatchlings:

Northern Gulf (AL and FL panhandle) - oiling risk to entire hatchling cohort considered high; relocation of hatchlings (approximately 50,000 hatchlings) recommended for all nests; transport hatchlings for release off the east coast of Florida into the Atlantic; logistic elements identified - FWS and FFWCC to develop detailed protocols for implementation

SW Florida (including Dry Tortugas) - oiling risk to entire hatchling cohort not considered high; relocation of hatchlings not recommended at this time; FWS and FFWCC to develop detailed protocols (logistic elements identified) for a contingency plan that would be activated if oil projections/conditions warrant

Texas - oiling risk to entire hatchling cohort not considered high; relocation of hatchlings not recommended at this time; FWS and NPS, in coordination with TPWD, to develop detailed protocols (logistic elements identified) for a contingency plan that would be activated if oil projections/conditions warrant

----- Original Message -----

From: David Cottingham <David.Cottingham@noaa.gov>

Date: Tuesday, June 8, 2010 3:42 pm

Subject: report on today's meeting

To: Barbara Schroeder <Barbara.Schroeder@noaa.gov>, Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>

Cc: Jim Lecky <Jim.Lecky@noaa.gov>

Jim popped by to say that John O requested an update/report from your meeting today. Please shoot us an email when you get a chance.

thanks

.e: report on today's meeting

DC

--

David Cottingham  
Chief, Division of Marine Mammal and Sea Turtle Conservation  
NMFS Office of Protected Resources

phone: 301-713-2322 ext 101

fax: 301-427-2522

Re: JIC Turtles/controlled burn

**Subject:** Re: JIC Turtles/controlled burn

**From:** "Barbara.Schroeder" <Barbara.Schroeder@noaa.gov>

**Date:** Mon, 21 Jun 2010 21:02:04 -0400

**To:** tfrady@mercury.wh.who.edu

**CC:** Jennifer.Austin@noaa.gov, Justin.kenney@noaa.gov, Scott.Smullen@noaa.gov, SGilson@doc.gov, David.Cottingham@noaa.gov, Kyle.Baker@noaa.gov, mhziccardi@ucdavis.edu, Sara.McNulty@noaa.gov, Connie.Barclay@noaa.gov, John.Ewald@noaa.gov, Monica.Allen@noaa.gov

Here are my edits, comments, questions, suggestions on both documents.  
tfrady@mercury.wh.who.edu wrote:

Hi all: attached materials are drafts that incorporate comments I have received so far. I have sent to the Houma to get review from the Burn Unit.

Also, the social media branch here stopped by to let me know they are getting hits mostly owing to the YouTube video that's out there. They were wondering if there was anything relevant they could use on Twitter or FB. I am wondering if there are one or two stats about at-sea turtle ops we can get out now via twitter and FB ahead of a release relevant to turtles and burn ops. Thoughts? What about numbers of turtles taken from areas adjacent to burns or number of directed trips? Others? Thoughts?

TPsforTurtleBurn3 bas.docx

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**Content-Encoding:** base64

NRTurtle3 bas.docx

**Content-Type:** application/vnd.openxmlformats-officedocument.wordprocessingml.document

**Content-Encoding:** base64



**From:** [Robert Hoffman](#)  
**To:** [Charlie Henry](#); [Lisa Symons](#)  
**Cc:** [hollv\\_herod@fws.gov](mailto:hollv_herod@fws.gov); [Jessica Powell](#); [Alexis Gutierrez](#); [Barbara Schroeder](#); [David Bernhart](#); [Kyle Baker](#); [Calusa Horn](#); [Karla Reece](#)  
**Subject:** section 7 on Burns and skimmer use  
**Date:** Tuesday, June 15, 2010 10:29:32 AM  
**Attachments:** [BMPs Oil Spill.doc](#)  
[attachment 1.docx](#)  
[Attachment 2.doc](#)

---

As you are the Coast Guard's (USCG) designated federal representatives for of the ongoing emergency section 7 consultation (50 CFR 402.05) with the USCG on the response to the Deep Horizon oil spill I wanted to ensure you are aware of the effects on listed species as a result of the above referenced activities.

The use of In-situ burns and skimmers are important aspect of the response actions; however, they adversely affect sea turtles and marine mammals. The areas targeted for burning are the same type of areas targeted by our turtle rescue teams. As such there are undoubtedly a number of sea turtles being burned alive during each in-situ burn. Skimming operations have two documented takes of sea turtles; however, we believe there could be many more undocumented takes. To minimize the effects on listed species under NMFS jurisdiction we offer the attached best management plans. Please keep us apprised if and when these are implemented. Please keep in mind that minimization of effects and monitoring of effects are required by section 7 of the ESA.

**Subject:** Re: [Fwd: Draft In-Situ burn plan]

**From:** Kyle Baker <Kyle.Baker@noaa.gov>

**Date:** Fri, 18 Jun 2010 08:35:30 -0500

**To:** Calusa Horn <Calusa.Horn@noaa.gov>

**CC:** Robert Hoffman <Robert.Hoffman@noaa.gov>, will\_meeks@fws.gov, Calvin Douglas <cdouglas@anchorqea.com>, Holly\_Herod@fws.gov, Michael Ziccardi <mhziccardi@ucdavis.edu>, Sara McNulty <Sara.McNulty@noaa.gov>

Calusa, the issue is heavy oil. At least over here, the heavy oil is offshore and turtles can be quite difficult to see. SO offshore is a priority if observer resources are limited. Also, all burns are occurring offshore (50 miles or more). Maybe things are different there? I agree the language should be removed and priorities for deployment (skimmer type and location) be worked out through separate coordination.

Calusa Horn wrote:

Hi Kyle,

Attached is the In-Situ burn plan. The burn plans includes nearshore areas. The skimmer and burning BMPs state "offshore" only and do not include the nearshore. Can we remove the "offshore" specific text, so that these BMPs can be used for near and offshore burns and skimmers operations. Please let me know ASAP. I would like to get these to the operations people today/this afternoon.

Thanks,

Calusa

---

**Subject:**

Draft In-Situ burn plan

**From:** Calvin Douglas <cdouglas@anchorqea.com>

**Date:** Thu, 17 Jun 2010 16:12:30 -0700

**To:** Will Meeks@fws.gov, Calusa.Horn@noaa.gov

**To:** Will Meeks@fws.gov, Calusa.Horn@noaa.gov

Per our conversation

**Calvin Kelly Douglas**

**ANCHOR QEA, LLC**

cdouglas@anchorqea.com

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**Subject:** Fwd: Stop Boom and Burn of Sea Turtles by BP Crews

**From:** Michael Ziccardi <mhziccardi@ucdavis.edu>

**Date:** Fri, 18 Jun 2010 19:01:39 -0500

**To:** Barbara Schroeder <Barbara.Schroeder@noaa.gov>, David Bernhart <David.Bernhart@noaa.gov>, Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Sara McNutly <Sara.McNulty@noaa.gov>, Teri Rowles <Teri.Rowles@noaa.gov>

(Embedded image moved to file: pic06334.jpg)

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(Embedded image moved to file: pic26500.jpg)

Endangered sea turtles are being burned alive in BP's cleanup efforts, according to an interview by a BP hired local boat owner involved in the cleanup operations. To read about BP's boom and burn operations killing sea turtles and watch the first-hand account of blocking sea turtle rescue from the oil slick, click here to go to our website Campaign Updates. We need your help now to tell local, federal, and BP officials to stop the boom and burn cleanup that is killing endangered sea turtles.

BP Blocks Sea Turtle Rescue, Wildlife Photos, and Interviews

In his shocking interview, Captain Mike describes how BP-hired workers prevented the rescue of sea turtles caught up in boomed oil offshore of Louisiana right before the boomed oil slick was set on fire to burn off the oil. For weeks, reports from the front lines have described BP officials denying access to oiled beaches, blocking reporters from taking photographs of oiled wildlife, and threatening to fire local workers if they participated in media interviews.

The Sea Turtles Restoration Project Launches 1-877-STRP-GLF

The Sea Turtle Restoration Project has launched 1-877-STRPGLF (787-7453)



a new toll-free number for reporting oil or injured as well as nesting or hatchling sea turtles in any state in the Gulf of Mexico. Calling this number directs you to local authorities who can provide rescue and rehabilitation of sea turtles in trouble.

Send a Message to STOP the Boom and Burn of Endangered Sea Turtles

Here's how you can help,

- 1) Click here to send a letter to local, federal, and BP officials to stop the boom and burn of endangered sea turtles.
- 2) Donate to the Sea Turtle Restoration Project to support our ongoing efforts to protect Gulf of Mexico's endangered sea turtles.

The Sea Turtles Restoration Project has sponsored 1-877-STRP GLF, a new toll-free phone number to call for rescue of any sea turtle in any state in the Gulf of Mexico. Calling this number directs you to local experts who can provide rescue and rehabilitation of oiled sea turtles, not to BP's system.

Thank you for your continued support of the Sea Turtle Restoration Project.

Sincerely,

Chris Pincetich, Ph.D., Campaigner & Marine Biologist, Sea Turtle Restoration Project

Photo: a loggerhead sea turtle caught in the oil slick (AP, Nicole Bengiveno).

(Embedded image moved to file: pic19169.jpg)

Sea Turtle Restoration Project Email News and Updates  
PO Box 370, Forest Knolls, CA 94933 USA

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"unsubscribe" in the subject line

(Embedded image moved to file: pic15724.gif)



\*\*\*\*\*

Michael Ziccardi DVM MPVM PhD  
Director, Oiled Wildlife Care Network  
Assoc. Professor, Clinical Wildlife Health  
Wildlife Health Center  
School of Veterinary Medicine  
University of California  
Davis, CA 95616  
O: (530) 754-5701  
C: (530) 979-7561  
F: (530) 752-3318  
E: [mhziccardi@ucdavis.edu](mailto:mhziccardi@ucdavis.edu)  
[www.owcn.org](http://www.owcn.org)

**Subject:** Re: Fw: Draft In-Situ burn plan

**From:** Kyle Baker <Kyle.Baker@noaa.gov>

**Date:** Fri, 18 Jun 2010 10:07:53 -0500

**To:** Holly\_Herod@fws.gov

**CC:** Jessica.White@noaa.gov, Joseph.J.Dillon@noaa.gov, Lisa.Symons@noaa.gov, Robert Hoffman <Robert.Hoffman@noaa.gov>, Will\_Meeks@fws.gov, Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Sara McNulty <Sara.McNulty@noaa.gov>, Calusa Horn <Calusa.Horn@noaa.gov>

Up to this point contracting needs in Mobile have been separate. Right now there is potential for skimming/burning contracts be consolidated. I truthfully know little of the contracts in Mobile or if they can be combined. Logistics are certainly different, but needs similar.

Holly\_Herod@fws.gov wrote:

do these contracts cover the terr. biological monitors as well or was that completed already?

Holly Herod  
US Fish and Wildlife Service  
Southeastern Regional Office  
Division of Planning and Permitting  
1875 Century Boulevard  
Atlanta, GA 30345  
Ph: 404-679-7089  
Fax: 404-679-7081

Kyle Baker <Kyle.Baker@noaa.gov>

06/18/2010 09:21 AM

To Jessica.White@noaa.gov

cc Robert Hoffman <Robert.Hoffman@noaa.gov>,  
Holly\_Herod@fws.gov, Will\_Meeks@fws.gov,  
Joseph.J.Dillon@noaa.gov, Lisa.Symons@noaa.gov

Subject Re: Fw: Draft In-Situ burn plan

Thank you! One thing I am working on is trying to get the observer contracts to cover both areas and establish coordinator positions (scheduling, deployment, training, support, etc) for both areas. The Alexis Gutierrez (in HQ right now) is working contracts for Houma and Calusa for Mobile. It seems we can consolidate those observer aspects with operations if we can get the contracts in place with support positions. We need to work on getting these measures in the plans. I know who to contact now!

The turtle BMPS should get in Houma plans today.

Jessica.White@noaa.gov wrote:

Hi Kyle,

You've asked the \$10M question that we are working to answer right now. At the present, the coordination (as far as I can tell) hasn't seemed to have much structure. There have been some conf calls on specific issues (like sea turtle concerns) that involved all command posts, but I am not sure what has been done beyond this (I must caveat this with the fact that I am just getting back involved after a 2 week hiatus, so perhaps Holly or Lisa Symons can provide a more accurate response).

In any case, Joe Dillon (NMFS in CA) just arrived to assist with Sect 7 coordination in area command, and I believe that he will be working with Holly to improve the process between command posts and also on integrating with ops (which I believe has been another challenge). We recognize that Sect 7 coordination needs some improvement and will look forward to working with you all to ensure that happens.

Thank you,  
Jessica

----- Original Message -----

From: Kyle Baker <Kyle.Baker@noaa.gov>

Date: Friday, June 18, 2010 6:33 am

Subject: Re: Fw: Draft In-Situ burn plan

To: Robert Hoffman <Robert.Hoffman@noaa.gov>

Cc: Holly Herod@fws.gov, Will Meeks@fws.gov, Jessica.White@noaa.gov

Bob and Jessiace, how exactly is the coordination working between Houma and Mobile and ESA issues?

Robert Hoffman wrote:

> I don't see the plan attached but if they are going to burn out of

> Mobile then they will need to follow our bmps.

> Holly Herod@fws.gov wrote:

>> Bob/Kyle,

>>

>> in situ burn plan for mobile, need noaa sec7 weigh in. Thanks!

>>

>> Holly Herod

>> US Fish and Wildlife Service

>> Southeastern Regional Office

>> Division of Planning and Permitting

>> 1875 Century Boulevard

>> Atlanta, GA 30345

>> Ph: 404-679-7089

>> Fax:404-679-7081

>>

>> ----- Forwarded by Holly Herod/R4/FWS/DOI on 06/17/2010 08:02 PM -----

>>

>> Will Meeks/NWRS/R9/FWS/DOI 06/17/2010 07:20 PM

>>

>> To

>> Holly Herod/R4/FWS/DOI@FWS

>> cc

>> Lorna Patrick/R4/FWS/DOI@FWS, Dan Everson/R4/FWS/DOI@FWS

>> Subject

>> Fw: Draft In-Situ burn plan

>>

>>

>>

>>  
>>  
>> Holly (et al.),  
>> We are under ever-increasing pressure to get this out from Ops and  
  
>> the Planning leads, respectively. I am pleased that the  
attachment  
>> to this is the information you provided from previous BMPs. I am  
  
>> going to review this before calling it a day (or night). If you  
have  
>> any concerns, please let me know. I can assure you we (Env.  
>> Planning) will get pushed for signatures early tomorrow.  
>> Thanks.  
>> Will Meeks  
>> U.S. Fish and Wildlife Service  
>> National Wildlife Refuge System  
>> Chief, Branch of Wildlife Resources  
>> Arlington Square Building  
>> 4401 N. Fairfax Drive, Room 657  
>> Arlington, VA 22203  
>> 703-358-2332 (work)  
>> 703-358-1929 (fax)  
>> [will.meeks@fws.gov](mailto:will.meeks@fws.gov)  
>> ----- Forwarded by Will Meeks/NWRS/R9/FWS/DOI on 06/17/2010 06:17  
PM  
>> -----  
>>  
>> "Calvin Douglas" <[cdouglas@anchoragea.com](mailto:cdouglas@anchoragea.com)> 06/17/2010 07:12 PM  
>>  
>> To  
>> <[Will.Meeks@fws.gov](mailto:Will.Meeks@fws.gov)>, <[Calusa.Horn@noaa.gov](mailto:Calusa.Horn@noaa.gov)>  
>> cc  
>>  
>> Subject  
>> Draft In-Situ burn plan  
>>  
>>  
>>  
>>  
>>  
>> Per our conversation  
>>  
>> Calvin Kelly Douglas  
>> ANCHOR QEA, LLC [cdouglas@anchoragea.com](mailto:cdouglas@anchoragea.com)  
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>> [attachment "DRAFT MS 252 Near Shore In-Situ Burn Plan  
100615.docx"  
>> deleted by Holly Herod/R4/FWS/DOI] [attachment "Attachment A  
>> Combined.pdf" deleted by Holly Herod/R4/FWS/DOI]  
>

[attachment "kyle\_baker.vcf" deleted by Holly Herod/R4/FWS/DOI]

**Subject:** Re: Observer Contracts

**From:** <Sara.McNulty@noaa.gov>

**Date:** Sat, 19 Jun 2010 12:03:03 -0400

**To:** Kyle Baker <Kyle.Baker@noaa.gov>

**CC:** 'Michael Ziccardi' <mhziccardi@ucdavis.edu>, Sheila O'Brien

<Sheila.O'Brien@noaa.gov>, David Bernhart <David.Bernhart@noaa.gov>,

"Robert.Hoffman@noaa.gov" <Robert.Hoffman@noaa.gov>, Joseph.J.Dillon@noaa.gov, Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>

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Sara

----- Original Message -----

From: Kyle Baker <Kyle.Baker@noaa.gov>

Date: Saturday, June 19, 2010 11:41 am

Subject: Observer Contracts

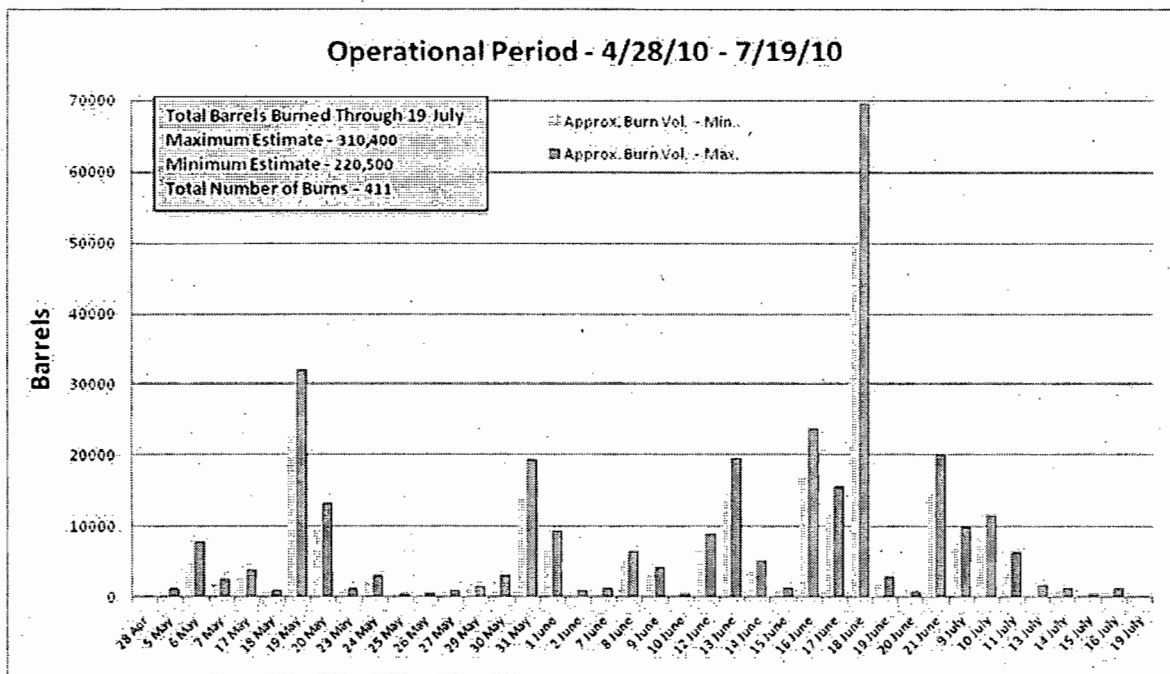
As of this morning, BP is working with the contracting office in Houston to move these contracts along and resolve outstanding insurance issues. To attempt to resolve this with any future contracts and not have this be a one-time fix, I need to compile a list of all names of contracts in development or anticipated possible future contracts so these will somehow be flagged or referred to. If it is possible to get that list asap, it would be greatly appreciated.

-kb

ESA observer companies.xlsx

**Content-Type:** application/octet-stream  
**Content-Encoding:** base64

# Controlled Burn Volume Estimate



Date	# of Burns/day	Approx. Burn Vol. - Min. (BBLs)	Approx. Burn Vol. - Max (BBLs)
4/28/10	1	77	108
5/05/10	4	670	1,095
5/06/10	4	4,555	7,754
5/07/10	6	1,674	2,343
5/17/10	7	2,659	3,722
5/18/10	4	653	914
5/19/10	6	22,800	31,900
5/20/10	7	9,300	13,000
5/23/10	8	800	1,100
5/24/10	14	2,000	2,900
5/25/10	6	300	400
5/26/10	7	400	500
5/27/10	13	600	800
5/28/10	1	0	0
5/29/10	7	1,000	1,400
5/30/10	9	2,100	3,000
5/31/10	17	13,800	19,300
6/1/10	4	6,600	9,200
6/2/10	1	600	800
6/7/10	7	700	1,000
6/8/10	15	4,500	6,400
6/9/10	17	2,900	4,100
6/10/10	1	300	400
6/12/10	15	6,300	8,800
6/13/10	14	13,800	19,400
6/14/10	18	3,600	5,000
6/15/10	10	800	1,200
6/16/10	10	16,800	23,500
6/17/10	5	11,100	15,500
6/18/10	16	49,600	69,500
6/19/10	6	1,900	2,700
6/20/10	7	500	700
6/21/10	21	14,200	19,900
7/8/10	1	0	0
7/9/10	15	6,900	9,700
7/10/10	10	8,200	11,500
7/11/10	15	4,400	6,200
7/13/10	22	1,200	1,600
7/14/10	26	900	1,300
7/15/10	12	300	400
7/16/10	19	900	1,300
7/17/10	1	0	0
7/19/10	2	100	100
<b>Total</b>	<b>411</b>	<b>220,500</b>	<b>310,400</b>



**Subject:** In-Situ Burn Logistics

**From:** Michael Ziccardi <mhziccardi@ucdavis.edu>

**Date:** Sun, 20 Jun 2010 09:37:04 -0500

**To:** Sara McNulty <Sara.McNulty@noaa.gov>, Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Kate.Sampson@noaa.gov, Blair Witherington <witherington@cfl.rr.com>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>, Mark Dodd <Mark.Dodd@dnr.state.ga.us>

Departure: On crew boat "Gulf Storm" leaving at 1200 from Venice (308 Haliburton Rd.). Tell check point you are with the In-Situ Burn Team.

Berthing: Staying on the "Mr. Andre".

Comms: A BP sat phone is on board. Unclear on internet access on this vessel, but there is access on many of them out there.

Supplies: Plenty of room on crew boat to bring capture gear.

\*\*\*\*\*

Michael Ziccardi DVM MPVM PhD  
Director, Oiled Wildlife Care Network  
Assoc. Professor, Clinical Wildlife Health  
Wildlife Health Center  
School of Veterinary Medicine  
University of California  
Davis, CA 95616  
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C: (530) 979-7561  
F: (530) 752-3318  
E: [mhziccardi@ucdavis.edu](mailto:mhziccardi@ucdavis.edu)  
[www.owcn.org](http://www.owcn.org)

**Subject:** Re: Observer Contracts

**From:** <Sara.McNulty@noaa.gov>

**Date:** Sun, 20 Jun 2010 11:28:25 -0400

**To:** Kyle Baker <Kyle.Baker@noaa.gov>

**CC:** Michael Ziccardi <mhziccardi@ucdavis.edu>, Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Sheila O'Brien <Sheila.O'Brien@noaa.gov>, David Bernhart <David.Bernhart@noaa.gov>, "Robert.Hoffman@noaa.gov" <Robert.Hoffman@noaa.gov>, Joseph.J.Dillon@noaa.gov

I agree with Mike, using the NMFS approved people, who have been vetted for some biological knowledge of sea turtles and marine mammals, would be the best option. Kyle, I'm not sure about the seismic observers, are they all marine bio/turtle handling people. If so, that should work.

Kyle, I'm not aware of any observer companies that are permitted for turtle research. Maybe some are. Perhaps the "NMFS approved" is being confused with the term permitted.

Sara.

---

We have approved folks in the rig removals and the seismic industry as well. The seismic observers may be a large pool of well-trained and available observers.

Michael Ziccardi wrote:

I would agree, though we want to ensure those observers out there are the best possible. I think the most effective mechanism in this case to utilize the "approved" folks if at all possible.

Mike

On Jun 20, 2010, at 6:40 AM, Kyle Baker wrote:

The "NMFS approved" requirement mostly comes from biological opinions for observer conditions for various types of activities. So it wouldn't apply here unless they were observers for one of those activities or contracting with us directly, then again, they would be NMFS approved then anyways.

I have a question I hope you all can answer. I keep hearing we need to use observer companies X and Y because they are permitted to collect turtles; however, anyone can collect oiled turtles in this response. I don't think it is necessary to have a permit unless it is an assessment or research project. Would be the thoughts or decisions made on this?

Thanks.

Alexis Gutierrez wrote:

Hi All! When I talked to Eric yesterday about observer issues, he mentioned that the NMFS approved list was for the dredging projects and that for the on-water oil retrieval we didn't necessarily have to stick to that list. Bob/David/Kyle, can you confirm that?  
Thanks, A

Sara.McNulty@noaa.gov wrote:

Hi Kyle,

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Sara

----- Original Message -----

From: Kyle Baker <Kyle.Baker@noaa.gov>

Date: Saturday, June 19, 2010 11:41 am

Subject: Observer Contracts

As of this morning, BP is working with the contracting office in Houston to move these contracts along and resolve outstanding insurance issues. To attempt to resolve this with any future contracts and not have this be a one-time fix, I need to compile a list of all names of contracts in development or anticipated possible future contracts so these will somehow be flagged or referred to. If it is possible to get that list asap, it would be greatly appreciated.

-kb

<kyle\_baker.vcf>

\*\*\*\*\*

Michael Ziccardi DVM MPVM PhD  
Director, Oiled Wildlife Care Network  
Assoc. Professor, Clinical Wildlife Health  
Wildlife Health Center  
School of Veterinary Medicine  
University of California  
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[www.owcn.org](http://www.owcn.org)

**Subject:** Re: In-Situ Burn Logistics

**From:** "Barbara.Schroeder" <Barbara.Schroeder@noaa.gov>

**Date:** Sun, 20 Jun 2010 10:57:49 -0400

**To:** Michael Ziccardi <mhziccardi@ucdavis.edu>

**CC:** Sara McNulty <Sara.McNulty@noaa.gov>, Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Kate.Sampson@noaa.gov, Blair Witherington <witherington@cfl.rr.com>, Mark Dodd <Mark.Dodd@dnr.state.ga.us>

Mike, the Mr. Andre is a coast guard vessel?????

Michael Ziccardi wrote:

Departure: On crew boat "Gulf Storm" leaving at 1200 from Venice (308 Haliburton Rd.). Tell check point you are with the In-Situ Burn Team.

Berthing: Staying on the "Mr. Andre".

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[www.owcn.org](http://www.owcn.org)

**Subject:** [Fwd: Re: Male/female Observer Question]

**From:** Kyle Baker <Kyle.Baker@noaa.gov>

**Date:** Mon, 21 Jun 2010 09:32:23 -0500

**To:** 'Michael Ziccardi' <mhziccardi@ucdavis.edu>, Sara McNulty <Sara.McNulty@noaa.gov>

**CC:** David Bernhart <David.Bernhart@noaa.gov>

FYI on male/females. I also think we need to open the box on available observers. Let me know if you need the contacts.

Hi Kyle,

Sorry to respond so late but I have been in Africa for the past 3 weeks. There is no policy on separate accommodations because in many cases we have men and women sleeping in the same state room. If there is a possibility of having separate quarters then we ask that they try to accommodate this. One other thing is to make sure they are not "hot bunking"-using the same bunk for more than one person.

I just talked with my NMFS observer colleagues and there are idle NMFS observers in the GOM. Why are you guys not using NMFS observers or contacting fisheries observer service providers? If needed, I can provide some names and suggestions.

**Subject:** Re: Observer Contracts

**From:** David Bernhart <David.Bernhart@noaa.gov>

**Date:** Mon, 21 Jun 2010 08:52:53 -0400

**To:** Kyle Baker <Kyle.Baker@noaa.gov>

**CC:** Sara.McNulty@noaa.gov, Michael Ziccardi <mhziccardi@ucdavis.edu>, Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Sheila O'Brien <Sheila.O'Brien@noaa.gov>, "Robert.Hoffman@noaa.gov" <Robert.Hoffman@noaa.gov>, Joseph.J.Dillon@noaa.gov, Calusa Horn <Calusa.Horn@noaa.gov>

Jumping in late on the discussion. Confirm everything that Kyle says. The NMFS Approved list Eric refers to only has meaning with respect to the hopper dredging work (and associated relocation trawling). I imagine anyone on that list would be very well-qualified for the kinds of things you want done. BUT, it will be a relatively narrow list. I think there would be lots of other qualified people out there who could be drawn from the seismic observers, fishery observers, maybe academia, or even the beach volunteers. I would recommend specify the qualifications/experience you want, not the NMFS approved label.

-DB

Kyle Baker wrote:

There are many BOs that require "NMFS-approved training" or something similar. This not only for hopper dredges. That's all I can say. I am the lead author on a technical report on establishment of a Non-Fisheries Observer Program. After considerable review of what is and is not in the observer world, my recommendation would be to not use the term NMFS-approved because it is more inclusive than just dredge observers.

Sara.McNulty@noaa.gov wrote:

Hmm, I'm only aware of the approval process for dredge observers. The NER/PR folks review all applications/resumes for all the observer companies along the east coast (used in SER and NER). I spent part of my time in my previous "life" reviewing resumes and verifying training requirements for the dredge observers. I am not familiar with how the seismic observers are "approved". If it is not the same, then perhaps we should stick with the dredge list.

Either way, we need to list out criteria for this specific spill effort. There are additional requirements that must be considered, such as Hazwoper.

Sara

---

The seismic folks are not all handling people, but come from various backgrounds of stranding, fishery observers, dredge observers, etc. My main point is that they are NMFS-approved. NMFS-approved is not defined by handling experience. These are two



different things, so we need to be careful about that if certain companies are not qualified. If we need a certain skill set, we need to define that rather than just state NMFS-Approved. My 2 euros...

Sara.McNulty@noaa.gov wrote:

I agree with Mike, using the NMFS approved people, who have been vetted for some biological knowledge of sea turtles and marine mammals, would be the best option. Kyle, I'm not sure about the seismic observers, are they all marine bio/turtle handling people. If so, that should work.

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-kb

<kyle\_baker.vcf>

\*\*\*\*\*

Michael Ziccardi DVM MPVM PhD  
Director, Oiled Wildlife Care Network  
Assoc. Professor, Clinical Wildlife Health  
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School of Veterinary Medicine  
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E: [mhziccardi@ucdavis.edu](mailto:mhziccardi@ucdavis.edu)  
[www.owcn.org](http://www.owcn.org)

**Subject:** Re: [Fwd: Re: Male/female Observer Question]

**From:** "Sara McNulty" <sara.mculty@noaa.gov>

**Date:** Mon, 21 Jun 2010 14:52:13 +0000

**To:** "Kyle Baker" <Kyle.Baker@noaa.gov>

Hey kyle, I'm in Venice for most of the day, so I'll catch up with you this later today or tomorrow.

S

-----Original Message-----

From: Kyle Baker <Kyle.Baker@noaa.gov>

Date: Mon, 21 Jun 2010 09:32:23

To: 'Michael Ziccardi' <mhziccardi@ucdavis.edu>; Sara McNulty <Sara.McNulty@noaa.gov>

Cc: David Bernhart <David.Bernhart@noaa.gov>

Subject: [Fwd: Re: Male/female Observer Question]

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**Subject:** Observer Discussion - 3pmET

**From:** <Sara.McNulty@noaa.gov>

**Date:** Tue, 22 Jun 2010 12:33:23 -0400

**To:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>, David Bernhart <David.Bernhart@noaa.gov>, Kyle Baker <Kyle.Baker@noaa.gov>, Bob Hoffman <Robert.Hoffman@noaa.gov>, Mike Ziccardi <mhziccardi@ucdavis.edu>, Teri.Rowles@noaa.gov, <Teri.Rowles@noaa.gov>

**CC:** sara.mculty@noaa.gov

Hi All,

David, Kyle and I spoke earlier today about the use of observers and a plan for deployment. We think it would be best to have a call to discuss the plan further.

David has two main concerns to bring up and discuss:

1) Burn Unit: We need to hold the USGC to the compliance requirements now (check all areas for protected species before burning). He would like observers deployed to each of the 8 burn units. We also need to determine if Mobile has begun burning and if we can deploy observers into those units also.

2) Observer Coordinator: We should move forward as soon as possible to find an observer coordinator for both Houma and Mobile to work all the logistics around deploying observers.

Call time - 2pm CT/3pm ET

Call in # - 866-543-7422

Code: 588156

Does this work?

Thanks,  
Sara

**Subject:** Re: Observer Discussion - 3pmET

**From:** <Sara.McNulty@noaa.gov>

**Date:** Tue, 22 Jun 2010 13:32:23 -0400

**To:** Sara.McNulty@noaa.gov

**CC:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>, David Bernhart <David.Bernhart@noaa.gov>, Kyle Baker <Kyle.Baker@noaa.gov>, Bob Hoffman <Robert.Hoffman@noaa.gov>, Mike Ziccardi <mhziccardi@ucdavis.edu>, Teri.Rowles@noaa.gov

Hi everyone,

I apologize for this...can we postpone this call until tomorrow at 10:30 CT/11:30 ET?

Thank you!

Sara

----- Original Message -----

From: Sara.McNulty@noaa.gov

Date: Tuesday, June 22, 2010 12:33 pm

Subject: Observer Discussion - 3pmET

Hi All,

David, Kyle and I spoke earlier today about the use of observers and a plan for deployment. We think it would be best to have a call to discuss the plan further.

David has two main concerns to bring up and discuss:

1) Burn Unit: We need to hold the USGC to the compliance requirements now (check all areas for protected species before burning). He would like observers deployed to each of the 8 burn units. We also need to determine if Mobile has begun burning and if we can deploy observers into those units also.

2) Observer Coordinator: We should move forward as soon as possible to find an observer coordinator for both Houma and Mobile to work all the logistics around deploying observers.

Call time - 2pm CT/3pm ET  
Call in # - 866-543-7422  
Code: 588156

Does this work?

Thanks,  
Sara

**Subject:** Re: Mark and burn ops

**From:** Kyle Baker <Kyle.Baker@noaa.gov>

**Date:** Tue, 22 Jun 2010 17:22:53 -0500

**To:** Sara.McNulty@noaa.gov

**CC:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>, Blair Witherington <witherington@cfl.rr.com>, Brian Stacy <Brian.Stacy@noaa.gov>, Kate Sardi Sampson <Kate.Sampson@noaa.gov>, Carrie Hubard <Carrie.W.Hubard@noaa.gov>, Bob Hoffman <Robert.Hoffman@noaa.gov>, Mike Ziccardi <mhziccardi@ucdavis.edu>, Wendy Teas <Wendy.Teas@noaa.gov>

Excellent. Ops wants to do the same for skimming. Apparently bunks are full for offshore skimming. We need to nail down the data form as well. There are some fields on the decision to burn we need to make sure are included.

Sara.McNulty@noaa.gov wrote:

Hi Everyone,

I just spoke to USCG Officer Andrew J. (Drew) from burn ops, to check in on Mark. Apparently, Mark was there for the start of a couple burns yesterday and the USCG had complete confidence in Mark immediately... and he integrated with the crew very easily. They did not burn today, but Mark was there for the process of collecting the booms. The vessel Mr Andre vessel is coming in today and will likely dock this later this evening. I tried Mark's cell and it went straight to voice mail. I suspect he will stay at the trailers tonight and may go out on the capture vessels tomorrow.

Drew said they were very interested to talk with us and Mark over the next couple days to create a plan for when the burn ops get back out on the water, likely on Saturday.

Sara



**Subject:** Mark and burn ops

**From:** <Sara.McNulty@noaa.gov>

**Date:** Tue, 22 Jun 2010 18:13:30 -0400

**To:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>, Blair Witherington <witherington@cfl.rr.com>, Brian Stacy <Brian.Stacy@noaa.gov>, Kate Sardi Sampson <Kate.Sampson@noaa.gov>, Carrie Hubbard <Carrie.W.Hubbard@noaa.gov>, Bob Hoffman <Robert.Hoffman@noaa.gov>, Kyle Baker <Kyle.Baker@noaa.gov>, Mike Ziccardi <mhziccardi@ucdavis.edu>, Wendy Teas <Wendy.Teas@noaa.gov>

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Drew said they were very interested to talk with us and Mark over the next couple days to create a plan for when the burn ops get back out on the water, likely on Saturday.

Sara

**Subject:** burn team report

**From:** Mark Dodd <Mark.Dodd@dnr.state.ga.us>

**Date:** Wed, 23 Jun 2010 22:13:55 -0400

**To:** Barbara.Shroeder@noaa.gov

**CC:** Sara.McNulty@noaa.gov

Please let me know if you get this. Sorry it did not go through yesterday.

Mark

Mark G. Dodd

Georgia Sea Turtle Program Coordinator

Georgia Department of Natural Resources

One Conservation Way

Brunswick, GA 31520-8687

Office (912) 280-6892

Cell (912) 269-4019

email: Mark.Dodd@dnr.state.ga.us

<b>Burn Team Observations 6_21_10.doc</b>
---

Report on Deepwater Horizon burn unit operations, 6/21/10.

The goal of the trip was to observe burn unit operations, determine the likelihood of sea turtle mortality associated with surface burning activities, and assess the possibility of putting sea turtle observers with the burn unit.

Arrived on scene approx. 5 miles northeast of the Deepwater Horizon accident site at approx. 1445 hours on 6/21/10. Two burns were in progress. We observed our first burn from the crew boat *Gulf Storm*. We arrived just as the burn was ignited. Conditions were light chop and winds 7-10 knots. I was not able to survey the area prior to ignition of the first fire. The oil in the area adjacent to the crew boat was heavy oil with a small amount of widely dispersed sargassum. Large continuous areas of oil were randomly distributed around the area. In general, there was no definable pattern to the oil and no weedline present. This was the pattern I saw during the rest of the day: widely dispersed small patches of sargassum with no definable weedline.

In general, two shrimp trawlers were used to pull a boom to concentrate oil for burning. The trawlers appeared to be approx. 300-500' apart while towing the boom. The boom is 500' in length and the tow cables are 300-500'. The boom skirt drops down in the water column approx. 2.5-3 ft. The trawlers were moving forward at approx. 1/2 knot prior to and during the burn. I was told if the trawlers move too quickly, the oil goes under the bottom of the boom and is not available for the burn. If a fire is in progress, the boom will overrun the fire and put it out. The oil is ignited with a package of 2 1/2 gallon plastic jugs of diesel fuel and a flare. Once the ignition package is placed inside the boom in the concentrated oil, it takes 2-3 minutes to ignite the oil. The fire starts fairly small (10 m) diameter area and builds to an area of 30 m diameter in approx. 3 minutes. I was told by the burn teams that they do not burn the orange emulsified oil. They target the heavy brown material. I monitored the first fire for approx. 5-7 minutes but was not close enough to survey for turtles.

Following the first burn, I transferred to one of the support vessels (Fox Sea) and was quickly put on one of the ignition boats. I monitored 2 burns from the ignition boat. Conditions were calm seas, 7-10 knot winds. We surveyed the area in front of the trawlers prior to ignition and found patches of heavy oil and widely scattered sargassum. The sargassum formed no pattern and there was not a definable weedline. I did not observe any turtles in the oil or sargassum in the path of the boom. We surveyed the boomed oil for sea turtles by running along the length of the u-shaped boom at a close distance (3-10 ft). I stood on the raised foredeck of the ignition boat during the survey. A small amount of sargassum was seen at the apex of the boom. In the second fire, the sargassum and oil could be seen rolling under the boom as it moved slowly forward. I felt confident that I could survey the entire area of heavy oil in the boom prior to ignition. I did not see any turtles in the boomed area on either fire. The boomed area contained material similar to what we observed previously in the turtle capture efforts including coconuts, pieces of marsh wrack, sargassum and driftwood. If turtles were seen in the boomed material, it would be possible to capture them from the ignition boat. The chronology of the 3 fires I observed was similar with the ignition taking 2-3 minutes and

the fire slowly building over approx. 3 minutes. Some of the fires continued to burn for several hours as the trawlers moved forward collecting additional fuel (oil). Other fires were out in 15-20 minutes. Generally, the fires appeared to move fairly slowly.

We observed 2 additional booming operations that did not ultimately result in a burn. I surveyed the boomed area from the raised foredeck of the ignition boat 3-10 ft outside the boom. In these cases, the trawlers were not capturing enough oil to burn. I did not see any turtles in the boomed areas.

Burning operations were concluded at approx 1830 hours and I returned to the support boat Mister Andre for the evening. The seas increased the next day and burning operations were called off due to an approaching storm system. The boom was loaded in the morning, and we steamed back to port. The boat crews and U.S. Coast Guard personnel were very accommodating and allowed access to all aspects of the operation.

I was not able to survey the oil and sargassum from the vantage point of the shrimp trawlers due to lack of time. From the ignition boat it appeared that the shrimp trawlers were too far from the boomed material to conduct a survey for sea turtles; however, this would need to be confirmed with direct observation. Also, I was not able to survey a burned area after the fire was extinguished. Finally, my observations of the material being burned were limited to a single afternoon. Several of the crews suggested that they targeted oiled weedlines for burning when the weedlines are available.

The U.S. Coast Guard personnel indicated that they generally had 10-15 fires per day under good conditions. There are normally 5-6 teams on site. A team includes 2 boom boats (shrimp trawlers), an ignition boat, and a support vessel (crew boat).

The following are general observations from the burning operations. These observations are based on a few hours in the field with the burn crews. Additional observations will be necessary to confirm the accuracy of this report.

- 1) Burns start relatively slowly and are generally small in size.
- 2) The burn crews focus on the heavy brown oil for burning.
- 3) My impression talking with the burn crews is that they work in a relatively restricted area. It would be helpful to see a map of all burns conducted to date (their potential impact may be limited to a small area).
- 4) Pre-burn inspections for sea turtles are feasible prior to ignition.
- 5) The best platform for monitoring for sea turtles appears to be the ignition boat because of the close proximity to the material.
- 6) I was not able to survey for sea turtles from the shrimp trawlers. The possibility of using the shrimp trawlers (boom boats) as a platform for sea turtle observations should be explored.
- 7) My overall impression is that the fires start relatively slowly and are restricted to a relatively small area. The probability of mortality of free-swimming turtles is fairly low. Sea turtles mired in oil and unable to escape should be easy to spot by an observer from the ignition boat. My suggestion is to have limited observer

coverage on the ignition boats to continue to collect data on the type of material being burned and to monitor for sea turtles (1 ignition boat per day).

Mark Dodd

Sea Turtle Program Coordinator

Georgia Department of Natural Resources

6/22/10

Re: burn team report

**Subject:** Re: burn team report

**From:** <Sara.McNulty@noaa.gov>

**Date:** Wed, 23 Jun 2010 21:37:12 -0500

**To:** Mark Dodd <Mark.Dodd@dnr.state.ga.us>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>

Got it! Mark, thanks so much for your efforts and for putting this document together (We will circulate to the group tomorrow). I'm glad we were able to speak with you tonight, I think it was extremely helpful for everyone to hear your account first hand.

Good luck tomorrow!

Sara

----- Original Message -----

From: Mark Dodd <Mark.Dodd@dnr.state.ga.us>

Date: Wednesday, June 23, 2010 9:13 pm

Subject: burn team report

Please let me know if you get this. Sorry it did not go through yesterday.

Mark

Mark G. Dodd

Georgia Sea Turtle Program Coordinator

Georgia Department of Natural Resources

One Conservation Way

Brunswick, GA 31520-8687

Office (912) 280-6892

Cell (912) 269-4019

email: [Mark.Dodd@dnr.state.ga.us](mailto:Mark.Dodd@dnr.state.ga.us)

**Subject:** Re: Offshore observers

**From:** <Sara.McNulty@noaa.gov>

**Date:** Thu, 24 Jun 2010 10:25:41 -0500

**To:** Calusa Horn <Calusa.Horn@noaa.gov>

Hi Calusa,

We contracted East coast Observers for 20 observers to work where ever we need them. We are currently looking into logistical issues with housing/safety for the observers.

The observer issue is blowing up over here, so I don't have details yet on how observers are going to be logistically arranged. We may start putting this on the planning and area command people.

Stay tuned, we will keep you in the loop.

Do you have any word on VOOs out of Destin yet? Sorry to be pushy, but this is somewhat time-sensitive.

Thank you so much for your help!

Sara

----- Original Message -----

From: Calusa Horn <Calusa.Horn@noaa.gov>

Date: Thursday, June 24, 2010 10:20 am

Subject: Offshore observers

Hey Sara,

Can you tell me about the Trish Bargo observers contract. How many individuals were included in that contract and is the contract just for

Houma? I am trying to locate a source of observers for offshore and

nearshore skimmer and burns here in mobile. If you could provide me the

details related to this contract. Please give me a call 251-586-4994 or

send me an email.

Thanks!

Calusa

[Fwd: burn team report]

**Subject:** [Fwd: burn team report]  
**From:** "Barbara.Schroeder" <Barbara.Schroeder@noaa.gov>  
**Date:** Thu, 24 Jun 2010 23:26:54 -0400  
**To:** Sara McNulty <Sara.McNulty@noaa.gov>

did you send this around? I don't recall. Just checking.

----- Original Message -----

**Subject:** burn team report  
**Date:** Wed, 23 Jun 2010 19:08:39 -0700 (PDT)  
**From:** Mark Dodd <[georgiaturtles@yahoo.com](mailto:georgiaturtles@yahoo.com)>  
**To:** [Barbara.Schroeder@noaa.gov](mailto:Barbara.Schroeder@noaa.gov)  
**CC:** [Sara.McNulty@noaa.gov](mailto:Sara.McNulty@noaa.gov)

Please let me know if this gets through. Sorry you didn't get it yesterday.

Mark

<b>Burn Team Observations 6_21_10.doc</b>
---

<b>Content-Type:</b> application/msword <b>Content-Encoding:</b> base64
--



**Subject:** Re: burn team report

**From:** Mark Dodd <Mark.Dodd@dnr.state.ga.us>

**Date:** Thu, 24 Jun 2010 06:22:04 -0400

**To:** Sara.McNulty@noaa.gov

I tried to upload the video to our DNR ftp site last night but it didn't work. I will try again this evening when we get off the water, but there is not a lot of time after we get back and eat. Do you want me to try to come up with a protocol and datasheets for the observers? I may need to stay back a day to get all this done. The weather looks like it is going to get worse later in the week (Saturday). Thanks.

Mark

Mark G. Dodd  
Georgia Sea Turtle Program Coordinator  
Georgia Department of Natural Resources  
One Conservation Way  
Brunswick, GA 31520-8687  
Office (912) 280-6892  
Cell (912) 269-4019  
email: [Mark.Dodd@dnr.state.ga.us](mailto:Mark.Dodd@dnr.state.ga.us)

| | | <[Sara.McNulty@noaa.gov](mailto:Sara.McNulty@noaa.gov)> 06/23/10 10:37 PM >>> | | |

Got it! Mark, thanks so much for your efforts and for putting this document together (We will circulate to the group tomorrow). I'm glad we were able to speak with you tonight, I think it was extremely helpful for everyone to hear your account first hand.

Good luck tomorrow!  
Sara

----- Original Message -----

From: Mark Dodd <[Mark.Dodd@dnr.state.ga.us](mailto:Mark.Dodd@dnr.state.ga.us)>

Date: Wednesday, June 23, 2010 9:13 pm

Subject: burn team report

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Mark

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Georgia Sea Turtle Program Coordinator  
Georgia Department of Natural Resources  
One Conservation Way  
Brunswick, GA 31520-8687  
Office (912) 280-6892  
Cell (912) 269-4019  
email: [Mark.Dodd@dnr.state.ga.us](mailto:Mark.Dodd@dnr.state.ga.us)

**Subject:** Re: burn team report  
**From:** <Sara.McNulty@noaa.gov>  
**Date:** Thu, 24 Jun 2010 08:00:55 -0500  
**To:** Mark Dodd <Mark.Dodd@dnr.state.ga.us>

Yes, I think you should definitely work on a basic protocol and datasheet fields. I know you don't have much time in the evenings, so do what you can. If weather allows you to stay back, that might be a good idea. I'll be talking to Barbara and Blair later today about on-water staffing, so I'll let you know what they want you to do.

No worries on the video, we can get that from you later.  
Sara

----- Original Message -----

From: Mark Dodd <Mark.Dodd@dnr.state.ga.us>  
Date: Thursday, June 24, 2010 5:22 am  
Subject: Re: burn team report

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Brunswick, GA 31520-8687  
Office (912) 280-6892  
Cell (912) 269-4019  
email: [Mark.Dodd@dnr.state.ga.us](mailto:Mark.Dodd@dnr.state.ga.us)

||| <Sara.McNulty@noaa.gov> 06/23/10 10:37 PM >>> |||

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Sara

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Date: Wednesday, June 23, 2010 9:13 pm  
Subject: burn team report

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Mark

Mark G. Dodd  
Georgia Sea Turtle Program Coordinator  
Georgia Department of Natural Resources  
One Conservation Way  
Brunswick, GA 31520-8687  
Office (912) 280-6892  
Cell (912) 269-4019  
email: [Mark.Dodd@dnr.state.ga.us](mailto:Mark.Dodd@dnr.state.ga.us)

**Subject:** Fwd: burn team report

**From:** <Sara.McNulty@noaa.gov>

**Date:** Thu, 24 Jun 2010 10:02:28 -0500

**To:** Barbara Schroeder <Barbara.Schroeder@noaa.gov>, Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Mike Ziccardi <mhziccardi@ucdavis.edu>, Teri.Rowles@noaa.gov, <Teri.Rowles@noaa.gov>, Brian Stacy <Brian.Stacy@noaa.gov>

Here is an initial report from Mark on his burn observations. He is working on a basic protocol for observers to follow when working with the burn units.

Sara

**ForwardedMessage.eml**

**Content-Type:** message/rfc822

**Content-Encoding:** 7bit

Meyer Glitzenstein & Crystal  
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Katherine A. Meyer  
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July 19, 2010

**By Electronic Mail**

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Lawson.Fite@usdoj.gov

Martha Mann  
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Principal Deputy Assistant Attorney General  
Robert.Dreher@usdoj.gov

**Re: Inappropriate Withholding Of In-situ Burn Observer Data – Animal  
Welfare Institute v. BP, Civ. No. 10-1866 (E.D. La)**

Plaintiffs brought suit in the above-referenced matter against the Coast Guard and BP,  
and sought emergency relief from the Court to compel Defendants to comply with the Outer



Continental Shelf Lands Act, the Endangered Species Act, and the Clean Water Act. On July 2, 2010, the parties reached an interim agreement, which provided among other things that the Coast Guard would provide information before burns recommenced sufficient for plaintiffs to determine whether further judicial relief is necessary. Therefore, plaintiffs made a substantial concession and withdrew their TRO motion on the basis of having specific information available to them to inform further litigation decisions such as the necessity of emergency relief from the Court to remedy unlawful takes of federally protected sea turtles until and unless an incidental take permit is obtained from the National Marine Fisheries Service.

On July 3, 2010, the Coast Guard (via DOJ) facilitated a technical meeting pursuant to the interim agreement. During that call, Coast Guard representatives gave assurances to plaintiffs that observer data sheets would be filled out by a qualified observer for each burn and that the data sheets would not be altered, redacted, or censored in any way. Additionally, because plaintiffs and independent biologists explained that there existed a serious information disconnect with respect to sea turtles and in-situ burns, Coast Guard representatives assured plaintiffs that they would be immediately figuring out ways to keep the public and plaintiffs informed of in-situ burn operations, including by considering posting observer data sheets publicly on the internet to inform plaintiffs' litigation decisionmaking (i.e., whether to renew our motion for emergency relief from the court due to violations of federal law).<sup>1</sup>

On July 4, 2010, plaintiffs authorized in-situ burns for July 5 conditioned on having at least one observer present on each burn team, and on receiving any observer data sheets in a timely fashion (which a DOJ attorney personally assured me would only take "a couple of days at most"). The July 5 burns never occurred due to weather.

On July 9, 2010, Defendants recommenced in-situ burns, and more than fifty burns have taken place since that time. However, plaintiffs have not received a single observer data sheet in the week and a half since burns recommenced. Despite the fact that no final protocols for sea turtle protection are yet in place (the Coast Guard is operating pursuant to draft protocols that have serious inadequacies as highlighted in our previous correspondence), *see* Attachment A (Comments From Independent Biologists On Draft Protocols for In-situ Burns, July 13, 2010), burns are occurring at a rapid pace and plaintiffs are receiving no information on the effectiveness of the newly implemented observer program and search, rescue, and rehabilitation protocols. As plaintiffs have made clear since before signing the interim agreement, a

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<sup>1</sup> The document entitled "Responses to Concerns Raised by Plaintiffs in 10-CV-1866 (E.D. La.)" explicitly notes plaintiffs' July 3, 2010 request for observer data sheets and similar pertinent information on turtle presence and risk minimization, and explains that the Coast Guard "is currently examining internal data collection and dissemination processes to determine exactly how such information can be made more readily accessible to the general public." In the nearly two weeks since that document was circulated, no information on sea turtle presence and minimization has been made available to the public or plaintiffs.

transparent information exchange regarding the effectiveness of turtle protection practices is essential in determining whether to seek immediate judicial relief for potential legal violations.

Moreover, it was brought to plaintiffs' attention for the first time on July 15 that no observer data sheets will be provided to plaintiffs until after the Coast Guard "quality-checks" the data for five days (after waiting many days for the burn teams to return to land). This is problematic not only because it means that such long delays result in stale 10-day-old (or longer) information on sea turtle presence and risk minimization, but also because that data would necessarily have been filtered in some capacity during the "quality-checking." While plaintiffs recognize that circumstances on the ground may slow the exchange of information, "quality-checking" is precisely what the Coast Guard committed not to do during the conference call when it assured plaintiffs that the observer data sheets received by plaintiffs would not be altered, censored, or redacted in any way. Therefore, because of the excessive length of time between the burns and the provision of data sheets to plaintiffs, and because of the filtered nature of the observer data sheets that will be provided to plaintiffs, this approach is impermissible and plainly violates the spirit of the interim agreement entered into by the parties.

Accordingly, in an effort to avoid further litigation and/or emergency relief with respect to this issue, plaintiffs respectfully request that the Coast Guard provide unfiltered, unredacted, and uncensored observer data sheets for each in-situ burn in a timely fashion. While plaintiffs appreciate the logistical difficulties on the ground, and are willing to accommodate those difficulties within reason, withholding highly pertinent documents from interested and affected parties for nearly two weeks is entirely unacceptable, particularly in the context of pending litigation with potentially urgent consequences for endangered and threatened species. If, by the end of business on Wednesday, July 21, 2010, you have not provided us with the information we have requested – and which you previously agreed to make available to plaintiffs and the public – we may have no choice but to pursue our litigation claims on an expedited basis, to ensure that the endangered and threatened sea turtles are adequately protected.<sup>2</sup>

Sincerely,

/s/ William S. Eubanks II

William S. Eubanks II  
Katherine A. Meyer

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<sup>2</sup> While plaintiffs recognize that observer data sheets from the most recent in-situ burn operations might not be available on or before July 21, 2010 because those burn teams might still be at sea, at bare minimum, plaintiffs are entitled to observer data sheets from at least the first week of recommenced in-situ burn operations (July 9-July 15) – since there is no dispute that those burn teams have returned to shore because DOJ attorney have personally assured plaintiffs that burn teams do not stay on the water for more than 5-7 days.

# **ATTACHMENT A**



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Telephone (202) 588-5206  
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meyerglitz@meyerglitz.com

July 13, 2010

**By Electronic Mail**

Lawson Fite  
U.S. Department of Justice  
Environment and Natural Resources Division  
Lawson.Fite@usdoj.gov

Martha Mann  
U.S. Department of Justice  
Environment and Natural Resources Division  
Martha.Mann@usdoj.gov

**Re: Comments From Independent Biologists On Draft Protocols For In-situ  
Burns – Animal Welfare Institute v. BP, Civ. No. 10-1866 (E.D. La)**

As a result of plaintiffs' lawsuit against BP and the Coast Guard seeking the creation and expeditious implementation of in-situ burn practices and protocols related to sea turtle protection, and pursuant an interim agreement entered between the parties on July 2, 2010, the Coast Guard provided plaintiffs with draft Best Management Practices ("BMPs") on July 6, 2010 for observer inclusion and for sea turtle search, rescue, and rehabilitation as part of in-situ burns. Pursuant to the interim agreement, plaintiffs and other independent sea turtle biologists are entitled to provide comments on those draft practices and protocols.<sup>1</sup>

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<sup>1</sup> The plaintiffs have consulted with many leading sea turtle biologists including Dr. Jim Spotila, Dr. Pamela Plotkin, Dr. Wallace J. Nichols, Dr. Christopher Pincetich, Jack Woody, Todd Steiner, and Mark Dodd.



Accordingly, in no particular order, the following comments constitute serious concerns raised by the independent scientific community with respect to the Coast Guard's draft protocols. These concerns should be timely addressed and incorporated into any final practices and protocols adopted by the Coast Guard and BP, in order to maximize assurances that endangered and threatened sea turtles have been removed from areas where they will be harmed, and hence to avoid further litigation over these issues:

- The BMPs and other in-situ burn protocol documents frequently use precatory language such as "if possible." Such language allows the Unified Command, the Coast Guard, and any contractors broad discretion to avoid certain obligations imposed on them under various federal laws, including the Outer Continental Shelf Lands Act ("OCSLA") and the Endangered Species Act ("ESA"). As such, precatory language of this nature should be deleted from the BMPs and related documents to ensure that each of the actors involved does not kill, harm, or harass any listed sea turtles in violation of the ESA and other pertinent federal laws.
- The BMPs indicate that the Coast Guard should catch turtles if possible before commencing burns. However, because of the rarity of these species, as well as the legal obligation of the Coast Guard and BP to comply with the ESA with respect to these listed species unless and until BP and the Coast Guard are granted an incidental take permit from NMFS pursuant to section 10 of the ESA, the BMPs must be changed to mandate that a burn cannot commence unless all turtles observed in a burn box are first caught and removed. Further, if it is impossible to remove a turtle for logistical reasons, a burn at that site should be deemed inappropriate and other oil containment strategies should be explored. Indeed, this is precisely the approach being taken by Unified Command with respect to marine mammals – if they are present in a given area, burning is not allowed.
- The protocols indicate that trained people should be used if possible. Because there are many trained sea turtle biologists on the ground in Louisiana waiting for the opportunity to join turtle search and rescue teams (and the Coast Guard has had some of these individuals' CVs and biographies for more than a week), there is no reason to allow anyone other than trained biologists to serve as observers or rescuers.
- It is critical that more biologists be permitted to assist in turtle observation, search, and rescue efforts both related to in-situ burns and otherwise as part of the oil spill response. There are many leading sea turtle experts on the ground in Venice, Louisiana and in other important Gulf locations who have not been allowed on the water despite their expertise in these issues. Such a failure to include these prominent biologists in the cleanup is irresponsible under the circumstances, and these individuals should be immediately included in any further search and rescue efforts.

- In addition to idle sea turtle biologists in the Gulf who are prepared to assist with turtle efforts, there are a number of idle boat captains in Venice, Louisiana who are similarly prepared to assist with turtle rescue efforts. The Coast Guard and Unified Command should contract with some of the idle captains (and biologists) to do search and rescue missions unrelated to burn teams in areas where turtles are expected to be found (i.e., sargassum).
- It appears that most of the equipment listed on the Coast Guard's equipment sheet is for collecting and rescuing juvenile Kemp's Ridley turtles, which are much smaller than adult loggerhead and leatherback turtles. The Coast Guard must ensure that each burn team has the proper equipment to collect and rescue all turtle sizes that exist in the Gulf. Because reproductive age sea turtles are the most important to sustaining Gulf sea turtle populations, the BMPs must require that any observation and rescue teams have equipment and staff available to bring adult turtles on board (which can weigh up to 1,000 pounds for Leatherback turtles). This would include enough staff to rescue large adults, as well as boats with rear ramps or hoists and large nets to bring these adults towards the boat. Also, breakaway dip nets should be available in case they are needed.
- While having at least one observer on each burn team is a step in the right direction, plaintiffs believe that having multiple observers on the boats would increase the turtle rescue rate. Further, there should also be a dedicated wildlife boat that operates with each burn team. That boat should survey the general area (i.e., the same oil line and other nearby areas where turtles would be expected) and collect any turtles that are spotted. Searching only in the burn box and immediately adjacent to the booms and burn box would mean that many oil-soaked turtles in need of attention are purposely being passed over, and such a result is not permissible in light of the ESA.
- The Coast Guard should immediately set up a Sea Turtle Rescue Task Force to be part of the Joint Incident Command. The task force should contain multiple boats for high-quality search, rescue, and rehabilitation efforts for sea turtles. Sea Turtle Rescue Task Force teams can search approximately 100-200 square miles each day, and the number of Task Force teams on the water each day must be scaled to the size of the incident response. Appropriate numbers of task force boat teams should be combined and deployed throughout the incident area to search the entire incident area each week.
- Firsthand information indicates that logistics out of Venice are difficult and basing in Destin is impractical. Thus, the Coast Guard should consider where additional efforts could be based with sea turtle rescue and protection in mind. A

ship-based team would be ideal, and there are a number of idle vessels and turtle biologists that are willing to assist with this effort.

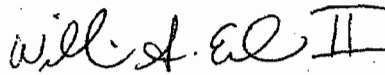
- First page/Memo to Area Unified Command: the sentence “Due to area, environmental, and situational differences amongst the unique operation areas, we recommend that the Environmental Units in the incident commands reserves the authority to amend these BMPs as they deem necessary, and have them approved by their respective commands.” This statement provides too much discretion to individuals who are not turtle experts – as it is worded currently, it provides an opportunity for anyone at anytime to deviate from the BMPs and burn sea turtles in direct violation of the ESA. This sentence must be deleted.
- First page of BMP/Section on BMPs to reduce impacts to sea turtles: “Have trained observer (if available) or a crew member dedicated to looking for sea turtles (and marine mammals) during corraling operations.” Observers must be required to do more than look and observe. Looking and observing will help them find adult and large juvenile turtles, but it will likely not help them find hatchling turtles. Hatchlings will often float very quietly within sargassum and other flotsam at the surface of the water column. They remain very still and will be missed from observation unless one actually “stirs” the sargassum/oil mixture to elicit a response. The observers need to literally make contact with the oil patches in the corralled area before the burn. They can do this very simply using a long pole from the boat to gently stir the sargassum/oil. Observers need to be trained to look for/observe all life stages.
- First page of BMP/Section on BMPs to reduce impacts to sea turtles: “If possible all sargassum that is not oiled or is only very lightly oiled should be avoided.” This statement appears to be better placed in a BMP that identifies what areas of the Gulf should and should not be skimmed for oil, rather than in the BMP for burn operations for sea turtles and marine mammals. If, however, the intent of this statement is to avoid looking/observing for turtles in sargassum that is not oiled or lightly oiled and within the corral, it must be stricken completely. As currently written, our interpretation of this statement is that this is a directive to not search for turtles (avoid) if clean or lightly oiled sargassum is found in the corral before the burn.
- Incorporate acoustic deterrence methods before burns commence (could be mounted to the boats). Much research has been done on the effectiveness of acoustic methods to deter marine mammals and sea turtles, but these methods are not being implemented by the Coast Guard and BP as part of their burns. Such methods should be incorporated, to the extent that these methods will not themselves harass sea turtles.

- Unless and until an ITP is granted by NMFS (which would first require the Coast Guard and BP to submit an ITP application), the Coast Guard must provide plaintiffs (and preferably the public at large) with all information related to any turtles taken (killed, harmed, harassed, or otherwise taken as defined by Section 9 of the ESA) during the in-situ burn operations in the Gulf. The information should provide specific details on the species taken and the circumstances surrounding the unauthorized take.
- The rarest of these species, which also appears to be disproportionately affected by this oil spill, is the Kemp's Ridley species. Because of its rarity, and the ever-increasing number of dead turtles being collected by the Coast Guard in the Gulf due to the oil spill, Unified Command must maximize its efforts to find and remove them from the oil spill area. Any sea turtle hatchling, juvenile, or adult that is found within the oil areas, whether in clean sargassum or oiled sargassum, whether in clean water or oiled water, should be picked up and removed to a safe place. A safe place should be truly safe – not an area that will allow them back into the heavily oiled areas (and may include aquariums for the time being until the turtles can be safely returned to the Gulf or relocated to an appropriate area). The turtles should not be taken to the Atlantic Ocean because that is outside their normal development habitat and will cause long-term problems for these species.
- Any amendments to the BMPs or other protocol documents should not occur without at least 48 hours of notice to plaintiffs and an opportunity to comment on such amendments prior to incorporation.
- Because turtles can swim long distances, the concept of conducting surveys a full day in advance of a planned burn is unworkable. An area cleared on Day 1, for example, could have multiple turtles on Day 2. Thus, thorough surveys must be completed immediately prior to the burn, and burns should not commence until qualified observers are satisfied that all turtles have been removed from the area to be burned and adjacent areas.
- A survey of the area to be burned should be mandatory, and all pertinent data must be included on the observer data sheets. Those sheets must be made available to plaintiffs as soon as practicable (and preferably to the public at large via the internet) to increase the transparency of the burn operations and to ensure that all federal laws are being complied with.
- The Sea Turtle At-Sea Retrieval Protocol and the Observer Protocol contain contradictory statements about the use of a wet towel. One says that the towel should cover the turtle; one says the turtle should be on top of the towel. Please clarify this discrepancy.

- Because turtles can appear comatose for up to 24 hours when they are in fact alive, no definitive status of a particular turtle should be concluded without first having a qualified turtle veterinarian or biologist confirming that a turtle is actually dead.

Plaintiffs and the independent scientific community believe that the above comments are important considerations that should be timely adopted in any final protocols on in-situ burns by the Coast Guard, Unified Command, and/or BP. Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Will S. Eubanks II". The signature is written in a cursive, flowing style.

William S. Eubanks II  
Katherine A. Meyer

**Subject:** Fwd: FW: Inappropriate Withholding of Observer Data Sheets for In-situ Burn Operations

**From:** <Sara.McNulty@noaa.gov>

**Date:** Mon, 19 Jul 2010 21:02:12 -0500

**To:** Barbara Schroeder <Barbara.Schroeder@noaa.gov>, Luke Szymanski <lukes@aisobservers.com>, Mike Ziccardi <mhziccardi@ucdavis.edu>, Sarah Wilkin <Sarah.Wilkin@noaa.gov>, Teresa Turk <Teresa.Turk@noaa.gov>, Teri.Rowles@noaa.gov, <Teri.Rowles@noaa.gov>

Hi All,

Rich Beyer, a USCG attorney, came by a little while ago regarding the attached data sheet letter. I told him that we had gotten the letter through NOAA channels and that we have not yet gotten the data forms back from the burn ops observers, but 3 people are coming in tonight, so we should have the forms soon.

He said he would like to coordinate with us on their response to this letter.

Sara

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**Content-Type:** message/rfc822

**Content-Encoding:** 7bit

**STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**In re:**

**EMERGENCY AUTHORIZATION FOR  
PROACTIVE MEASURES, RESTORATION,  
AND CERTAIN OTHER MEASURES MADE  
NECESSARY BY THE DEEPWATER HORIZON  
OIL SPILL**

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**OGC NO. 10-1610**

**SECOND AMENDED EMERGENCY FINAL ORDER**

Under Sections 120.569(2)(n) and 252.36 of the Florida Statutes ("F.S."), and upon consideration of the State of Florida Executive Order Nos. 10-99, 10-100, 10-106, and the following findings of fact, the State of Florida Department of Environmental Protection ("Department") enters this Emergency Final Order ("Order"), including Findings of Fact and Conclusions of Law, in response to the imminent or immediate danger to the public health, safety, and welfare of the citizens of the State of Florida resulting from the Deepwater Horizon Oil Spill that commenced on April 20, 2010 ("the Spill"). British Petroleum ("BP") has been determined to be a responsible party for the Spill.

**SPECIAL CONSIDERATIONS**

1. Governmental entities seeking reimbursement of any activities authorized in this order must do so consistent with, and as specified in, Florida's Financial Plan for Response to the Deepwater Horizon Oil Spill.
2. Governmental entities performing any activities authorized in this order shall conduct those activities in a manner consistent with the National Contingency Plan and/or the Area Contingency Plan under the National Response System.
3. Where more than one authorization under this Order is required for a proposed activity, the Department will conduct joint inspections by staff from applicable offices of the Department to the maximum extent practical.



## FINDINGS OF FACT

1. On the 20<sup>th</sup> day of April 2010, an explosion on the mobile drilling platform Deepwater Horizon occurred in the Gulf of Mexico, approximately 130 miles southeast of New Orleans, Louisiana. The rig ultimately sank on April 22, 2010; on April 24, 2010, the United States Coast Guard ("USCG") estimated that the damaged well was releasing approximately 42,000 gallons of crude oil per day. On April 28, 2010, the USCG increased this estimate to approximately 200,000 gallons per day; refinements of this estimate are ongoing. All efforts to contain the discharge have failed and may not succeed for an extended period of time. The Spill has the potential to cause widespread damage along Florida's shoreline and coastal estuaries within the following counties: Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, Wakulla, Jefferson, Taylor, Dixie, Levy, Citrus, Hernando, Pasco, Pinellas, Hillsborough, Manatee, Sarasota, Charlotte, Lee, Collier, Monroe, Miami-Dade, Broward and Palm Beach. These counties shall constitute the specific area covered by this Emergency Final Order. This area shall herein be referred to as the "Emergency Area."

2. By State of Florida Executive Order Nos. 10-99, 10-100, and 10-106, the Governor declared that a state of emergency exists throughout Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, Wakulla, Jefferson, Taylor, Dixie, Levy, Citrus, Hernando, Pasco, Pinellas, Hillsborough, Manatee, Sarasota, Charlotte, Lee, Collier, Monroe, Miami-Dade, Broward and Palm Beach counties, based upon the serious threat to the public health, safety and welfare posed by the Spill.

3. The Department finds that the Spill has created a state of emergency threatening the public health, safety, welfare, and property throughout the Emergency Area. As a result of the emergency, immediate action is necessary to prevent, contain or reduce damage to natural and cultural resources and property that may occur as a result of the Spill.

4. Oil associated with the Deepwater Horizon incident has now reached the salt waters of the State of Florida. This oil is detrimental to marine resources and endangers the health, safety, and welfare of the people of the State of Florida.

5. In situ burning of discharged oil reduces the detrimental environmental impact of discharged oil on marine resources and on the health, safety, and welfare of the people of the State of Florida.

6. The clean-up burden to the state and exposure to the public may be reduced by implementing in situ burning of oil under appropriate conditions before it reaches shore.

7. The Department finds that an emergency order is required to address the need for immediate action because the normal procedures for obtaining the necessary authorizations would not result in timely action to address the emergency.

8. The Department finds that immediate, strict compliance with the provisions of the statutes, rules, or orders noted within this Order would prevent, hinder, or delay necessary action in coping with the emergency, and that the actions authorized under this order are narrowly tailored to address the immediate need for action and are procedurally fair under the circumstances.

#### **CONCLUSIONS OF LAW**

1. Based on the findings recited above, it is hereby concluded that the emergency caused by the Spill continues to pose an immediate danger to the public health, safety, or welfare and requires an immediate order of the Department.

2. Under State of Florida Executive Order Nos. 10-99, 10-100, and 10-106, and Sections 120.569(2)(n) and 252.36, F.S., the Secretary of the Department is authorized to issue this Emergency Final Order.

3. Suspension of statutes and rules as noted within this Order is required so as not to prevent, hinder, or delay necessary action in coping with the emergency.

***THEREFORE, WITHIN THE EMERGENCY AREA, IT IS ORDERED:***

**A. SOLID WASTE MANAGEMENT**

Field authorizations may be issued prior to or following a site inspection by Department personnel for staging areas to be used for temporary storage or processing of Spill-generated debris. Such authorizations are required for all facilities that will be managing oil spill debris, including staging areas where waste is brought to the site for storage and transfer, sites where decontamination activities are being conducted, and sites where waste is being processed. No such authorization is needed under this section for sites where equipment or empty containers are being stored prior to or after use, or sites where oil spill debris is initially containerized near the cleanup area. Additional authorizations may be required by the Department's Division of Air Resource Management, as well as the Department's Coastal Construction Control Line, Joint Coastal, and Submerged Lands and Environmental Resource Permitting programs.

Field authorizations may be requested by providing a notice to the local office of the Department containing a description of the staging area design and operation, the location of the staging area, and the name, address, and telephone number of the site manager. Field authorizations also may be issued by Department staff prior to receiving written notice. Written or electronic records of all field authorizations shall be created and maintained by Department staff. Field authorizations may include specific conditions for the operation and closure of the staging area, and may include a required closure date that extends beyond the expiration date of this Order.

Staging areas shall be sited to avoid wetlands, beach and dune habitat, archaeological and historical sites, and other surface waters to the greatest extent possible; such areas that are used or affected must be fully restored upon cessation of use of the area. Persons wishing to locate staging areas on or near the beach and dune system shall utilize existing disturbed areas to the maximum extent practicable and shall first consult with the Florida Fish and Wildlife Conservation Commission ("FWC"), the Department's Bureau of Beaches and Coastal Systems

and the Department of State's Division of Historical Resources. Staging areas must cease operation, and all Spill-generated debris must be removed from the site, by the expiration date of this Order, unless a different closing date or closure conditions are specified in the field authorization. Failure to comply with the conditions of the field authorization, or failure to adequately close the site by the required closure date, may result in enforcement actions by the Department. Field authorizations issued prior to the effective date of this Order remain in effect but may be modified by the Department to include conditions and closure dates as specified herein.

**B. WATERS, WETLANDS, BEACHES & COASTAL SYSTEMS, & SUBMERGED LANDS**

**1. No Notice Required**

The following activities are authorized to be undertaken pursuant to Chapters 161, 253, 258, and Part IV of Chapter 373, F.S., and the applicable rules adopted thereunder, by BP and its contractors and by governmental entities to contain and prevent the spread of oil and oil contaminants, and to clean-up oil and oil contaminants:

(a) Placement of temporary containment booms and sorbent materials. To the maximum extent practicable, all booms and sorbent materials shall be deployed and maintained so as to minimize lying on or shading wetlands and submerged aquatic vegetation, so as to not create a navigational hazard, and so as to minimize entanglement risk or other adverse impacts to aquatic and wetland dependant fish and wildlife, and minimize adverse impacts to archaeological and historical sites.

(b) Placement and use of temporary floating devices designed exclusively to contain or collect oil contaminants at the mouths of water control structures, intake structures, canals, coastal inlets and passes, rivers, and streams, provided such devices are deployed and maintained so as to not create a navigational hazard or to cause upstream flooding or other adverse impacts to water resources to the maximum extent practicable.

(c) Placement and use of temporary devices not listed above, including air bubbler curtains, designed and used exclusively to contain, collect and prevent oil contaminants from entering coastal inlets and passes, water control structures, intake structures, canals, rivers and streams, provided such devices are deployed so as to not create a navigational hazard or to cause upstream flooding or other adverse impacts to water resources to the greatest extent practicable, and to minimize impacts to archaeological and historical sites.

(d) **Along shorelines other than sandy beaches**, installation and maintenance of hay bales, temporary sandbags or other similar materials to prevent contamination, provided such installation can be conducted, and such materials can be maintained and removed, in a manner that does not result in permanent dredging, filling or loss of wetland or submerged aquatic resources, or damage to archeological or historical resources. To the maximum extent practicable, all hay bales, sandbags or other similar materials shall be deployed so as to minimize lying on or shading wetland and submerged aquatic vegetation and to minimize adverse affects to aquatic and wetland dependant fish and wildlife. Such structures and materials shall be removed once the threat of contamination has abated. This does not authorize the construction of seawalls, bulkheads, rock revetments or other forms of retaining walls.

(e) Installation and maintenance of in-water signage or buoys warning boaters of such hazards as areas where booms and skimmers have been deployed and where heavy contamination exists. Such signage shall, to the extent practicable, be consistent with FWC standards and must adequately warn mariners of the existing hazards. Buoys shall be consistent with USCG marking for navigational hazards.

(f) Manual removal of stranded oil from sandy beaches. This method consists of removal of stranded oil, including surface oil, tar balls, tar patties, tar mats, and other weathered oil products, using hands, rakes, shovels, buckets, scrapers, sorbents, pitch forks, etc., and placing in containers. No mechanized equipment shall be used except for transportation of

collected oil and debris from the beach to the upland staging area. Equipment and vehicle access shall use only the designated beach access points. Driving of equipment along the beach shall be limited to the area seaward of the wrack or debris line to the maximum extent practicable. Equipment should transit between the beach access point and the wrack line using the most direct route to minimize travel over areas of the beach landward of the wrack or debris line. If stranded oil is present in the driving zone seaward of the wrack or debris line, driving of vehicles may occur directly landward of the stranded oil. During marine turtle nesting and shorebird nesting season (February 15-October 31), all activity shall be limited to daylight hours and all equipment and materials shall be removed from the beach at night, unless specific verbal or written approval is given by the Department for nighttime cleaning operations. All activities shall be conducted in a manner that avoids archeological and historical sites, and is in compliance with the Division of Historical Resources guidelines for archaeological and historical resources, attached hereto as Exhibit C.

(g) Mechanical removal of stranded oil and oiled sediments from sandy beaches within the following counties: Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, Wakulla, Jefferson, and Taylor. Entities undertaking activities authorized by an Incident Command Division may conduct mechanical removal of stranded oil and oiled sediments from sandy beaches. This method consists of removal of stranded oil and oiled sediments using mechanical equipment such as loaders and graders, as well as trucks, tractors and trailers for transportation of collected oil and oiled sediments. Other specialized equipment may be used for the sifting and removal of tar balls, patties, and mats. Digging of pits/trenches is authorized if subsurface oil may be present. Driving of equipment along the beach shall be limited to the area seaward of the wrack or debris line to the maximum extent practicable. Equipment should transit between the beach access point and the wrack line using the most direct route to minimize travel over areas of the beach landward of the wrack or debris line. If stranded oil is present in the driving zone seaward of the wrack or debris line, driving of vehicles may occur

directly landward of the stranded oil. During marine turtle nesting and shorebird nesting season (February 15-October 31), all activity shall be limited to daylight hours and all equipment and materials shall be removed from the beach at night, unless specific verbal or written approval is given by the Department for nighttime cleaning operations.

Mechanical removal of stranded oil and oiled sediments is authorized in accordance with the above description and the following special conditions shown below:

1. A reliable method to measure the volume of beach sediments removed during clean-up operations shall be documented and used by the entity conducting the activity. Upon completion of a section of the shoreline, an explanation of the documented method used and the recorded volume of beach sediments removed during clean-up shall be provided to the Department's Bureau of Beaches and Coastal Systems.

2. The removal of clean sand shall be minimized to the greatest extent practicable.

3. If work occurs during marine turtle and shorebird nesting seasons (February 15 – October 31), it is the responsibility of the entity conducting the activity to ensure compliance with the provisions below. Unless nighttime operations are explicitly approved as required above, all activity shall be limited to daylight hours and commence after completion of a nesting survey. All nest surveys shall be conducted only by persons with prior experience and training in the activities and who is duly authorized to conduct such activities through a valid permit issued by the FWC pursuant to Chapter 60E-1, F.A.C. All equipment and materials shall be removed from the beach at night.

- a. Sea Turtles. Activities shall be conducted in compliance with the "Sea Turtle Nest Protection Protocols for Clean-Up Crews on Beaches in Florida, Alabama, Mississippi, and Louisiana," attached hereto as Exhibit A.

- b. Shorebirds. Activities shall be conducted in compliance with the "Shorebird and Seabird Protection Protocols for Clean-up Crews on Beaches in Florida Operating Under DEP Emergency Order 10-1610," attached hereto as Exhibit B.

4. Activities shall be conducted in a manner that avoids archeological and historical sites, and is in compliance with the Division of Historical Resources guidelines for archaeological and historical resources, attached hereto as Exhibit C.

(h) Emergency beach access and upland staging areas. Creation of emergency beach access in order to place emergency response equipment on the beach, as well as creation of staging areas used to store equipment or to containerize oil spill debris, is authorized. Entities conducting the activity are encouraged to use existing beach access points and to avoid designated critical habitat for beach mice. Archaeological and historical sites must be avoided. Response/Construction equipment and supplies shall be stored landward of the beach/dune system during the night. Once the contamination has been abated, access and staging areas shall be restored to preexisting conditions. All such construction shall be limited to daylight hours after completion of a marine turtle nesting survey.

**2. Activities Requiring Field Authorizations or Emergency Permits**

**a. Wetlands and Other Surface Waters, Excluding Sandy Beaches.**

Field authorizations under Part IV of Chapter 373, F.S., and applicable rules adopted thereunder, may be issued to BP, its contractors, and governmental entities following notice to the Department and a field inspection by the Department as needed for the following activities in, on or over wetlands or other surface waters, but excluding activities on sandy beaches:

(1) Construction, use, and removal of temporary emergency response access roads and staging areas used to store equipment or to containerize oil spill debris. Such roads and staging areas shall be sited in uplands and shall use existing improved or previously cleared access points to the maximum extent practicable. If this cannot be done, construction and alteration must minimize work in wetlands or other surface waters and adverse impacts to aquatic and wetland dependant fish and wildlife to the maximum extent practicable. Archaeological and historical sites must be avoided. Wetlands and other surface waters shall not be dredged to obtain any fill material to construct any access roads or staging areas. Once



the contamination has been abated, all areas disturbed to construct and use these areas shall be restored to former contours and shall be stabilized to prevent erosion, sedimentation, and turbid runoff. Fill material used to create these areas shall be removed to an upland location where it will not adversely affect surface water flows and in a manner that does not cause flooding of adjacent lands. Any wetlands or other surface waters that were disturbed to establish these areas shall be re-vegetated in a manner that will facilitate restoration to preexisting conditions.

(2) Other activities that are part of an oil spill response plan developed by BP, its contractors, or a governmental entity that are designed to protect or remediate impacts to wetlands or other surface waters that may be impacted by the Spill. These activities will be reviewed and approved by the Department on a case-by-case basis through issuance of a field authorization.

(3) Decontamination areas for vessels at in-shore secondary cleaning locations as provided for in the "Sector Mobile, AL Deep Draft Vessel Evaluation and Cleaning Plan" dated May 9, 2010, or as that Plan may be amended.

Field authorizations for the above activities must be requested by providing a notice to the appropriate Department District Office containing a description of the work requested, the location of the work, and the name, address, and telephone number of the applicant who may be contacted concerning the work. Field authorizations may not be issued unless requested on or before the expiration date of this Order. Field authorizations may include specific conditions for the construction, operation, maintenance, and restoration of the authorized activities. Field authorizations issued under this Order remain in effect for the duration specified in the authorization, but may be extended through written modification by the Department. Failure to comply with the conditions of a field authorization permit may result in enforcement actions by the Department.

These procedures also are supplemental to, and do not replace, the ability to perform temporary emergency measures within the geographic limits of the Northwest Florida Water Management District using the Class A and Class B Emergency Provisions of Rule 62-312.090, F.A.C.

**b. Activities on and Adjacent to the Sandy Beach Shoreline**

This section applies to activities conducted pursuant to Chapter 161, F.S., and the applicable rules adopted thereunder, seaward of the Coastal Construction Control Line ("CCCL") as established by Rule 62B-26, F.A.C. Certain activities may additionally take place seaward of the Mean High Water shoreline. Emergency Permits for such activities shall be issued by the Department's Bureau of Beaches and Coastal Systems ("Bureau").

The Bureau may issue emergency permits to governmental entities and to BP and its contractors for the activities listed below:

(1) Protection of coastal dune lakes. Upon threat of contamination, lowering the water levels to manageable levels of coastal fresh water dune lakes that have a prior, documented connection between the lake and the Gulf of Mexico, and closing the coastal dune lake outlets to prevent contamination, may be authorized. Beach-quality sand, defined in Rule 62B-41.007(2)(j), F.A.C., or other temporary measures (such as absorbent booms) shall be used to close such outlets until the threat of contamination has been abated. Applicants are encouraged to use the sand excavated to lower lake levels in order to close the outlets. However, beach quality sand obtained from upland sources may be used upon approval by the Department. All such construction shall be limited to daylight hours after completion of a marine turtle nesting survey.

(2) Construction of emergency sand dikes. To limit the lateral extent of oil contamination, the use of beach-quality sand from upland sand sources to construct a sand dike on the existing beach berm may be authorized. Such berms shall be at an appropriate contour elevation to limit the landward extent of oil incursion. Such efforts shall not result in damage to

existing dunes or dune vegetation or archaeological or historical sites. All such construction shall be limited to daylight hours after completion of a marine turtle nesting survey and be done in coordination with FWC to ensure appropriate bird surveys or designation of bird monitors. This does not authorize the construction of seawalls, bulkheads, rock revetments or other forms of retaining walls.

(3) Beach scraping/blading. Manipulation of existing non-vegetated sand that resides on the existing beach face landward of mean high water in order to protect sand resources may be authorized. All such construction shall be limited to daylight hours after completion of a marine turtle nesting survey and be done in coordination with FWC to ensure appropriate bird surveys or designation of bird monitors. Activities shall be conducted in a manner that avoids archeological and historical sites, and is in compliance with the Division of Historical Resources guidelines for archaeological and historical resources, attached hereto as Exhibit C.

(4) Other activities that are part of an oil spill response plan developed by BP, its contractors, or a governmental entity that are designed to protect or remediate impacts to the beach/dune system that may be impacted by the Spill. These activities will be reviewed and approved by the Department on a case-by-case basis through issuance of an emergency permit.

### **3. Authorization to Use State-Owned Submerged Lands**

The activities authorized above that are located in, on, or over state-owned submerged lands are hereby granted a Letter of Consent under Rule 18-21.005(1)(c)14., F.A.C., provided:

- (a) The activities are conducted in accordance with the terms, conditions, and limitations of this Order; and,
- (b) Activities authorized under this Order must be conducted in conformance with the general conditions of Rule 18-21.004(7), F.A.C.
- (c) Archaeological and historical sites are avoided.

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**4. General Conditions**

(a) Applicable environmental resource, surface water management, dredge and fill, stormwater, and CCCL or joint coastal permits under Chapters 161 and Part IV of Chapter 373, F.S., and applicable state-owned submerged lands authorizations shall be required for other activities not authorized in this Order that do not otherwise qualify as an exempt activity under statute or rule.

(b) Nothing in this Order authorizes the taking, attempted taking, killing, pursuing, harassing, harming, molesting, capturing, possessing, or transporting of any species (or the nest or eggs of any species) listed under Rule 68A-27, F.A.C., or under the Federal Endangered Species Act, nor does this order relieve anyone from complying with any other statute, rule, or order of the FWC.

(c) Nothing herein shall be construed to infringe upon private property rights of owners of non-state owned submerged lands.

(d) Materials and devices authorized under this Order must be removed and disposed of in accordance with a Department-approved waste disposal plan as soon as practicable after the structures or devices:

(1) Have lost their effectiveness in collecting and retaining oil, or otherwise are no longer functioning as intended;

(2) Are no longer needed to absorb, collect, or contain oil after the threat of contamination has subsided; or

(3) Have fallen into disrepair, have become hazardous, or are adversely affecting, or have the potential to adversely affect, the environment, navigation, or the property of others; or otherwise have the potential to be a continuing source of pollution.

(e) The nature, timing, and sequence of preventative measures authorized under this Order shall be conducted in such a manner as to provide protection to, and so as to not disturb, native salt-tolerant vegetation and listed species and their habitat, including threatened

or endangered marine turtles, endangered manatees, endangered beach mice, endangered plant communities, and migratory shorebirds to the greatest extent practicable. Such activities shall minimize to the greatest extent practicable entanglement hazards for marine turtles and must avoid dune habitat known to be occupied by beach mice, marked marine turtle nests, and nesting shorebirds. All activities shall be conducted in a manner that avoids archeological and historical sites, and is in compliance with the Division of Historical Resources guidelines for archaeological and historical resources, attached hereto as Exhibit C.

**C. AIR**

1. In situ burning of oil in marine waters of the State associated with the Deepwater Horizon incident is authorized within the Emergency Area. All such in situ burning shall be conducted in accordance with the MC-252 Nearshore In Situ Burn Operational Plan.

2. Any solid waste resulting from the in situ burn shall be collected and shall be managed and disposed of in accordance with the BP MC252 Incident Waste Management and Disposal Plan and the Florida statutes and rules regulating the management and disposal of solid waste.

3. All persons conducting in situ burning of oil within the marine waters of the State shall create and maintain a record of the date, time, location and duration of each in situ burn, and shall provide the Department with a copy of the record upon request by the Department.

**D. GENERAL PROVISIONS**

**1. General Limitations**

The Department issues this Emergency Final Order solely to address the emergency created by the Spill. This Order shall not be construed to authorize any activity within the jurisdiction of the Department except in accordance with the express terms of this Order. Under no circumstances shall anything contained in this Order be construed to authorize the repair, replacement, or reconstruction of any type of unauthorized or illegal structure, habitable or

otherwise. This Order does not convey any property rights or any rights or privileges other than those specified in this Order.

**2. Suspension of Statutes and Rules**

(a) Within the Emergency Area, the requirements and effects of statutes and rules that conflict with the provisions of this Order are suspended to the extent necessary to implement this Order.

(b) To the extent that any requirement to obtain a permit, consent of use, or other authorization is waived by this Order, it should also be construed that the procedural requirements for obtaining such permit, consent of use or other authorization, including requirements for fees and publication of notices, are suspended for the duration of this order.

(c) Field authorizations and emergency permits will be evaluated in accordance with the non-procedural requirements, standards, and criteria of the applicable rules of the Department and the Board of Trustees.

**3. Interagency Coordination**

The Department shall coordinate with the FWC on protected and imperiled species issues and the Division of Historical Resources regarding protection of archeological and historical sites during the review of field authorizations and emergency permits.

**4. Other Authorizations Required**

This Order only provides relief from the specific regulatory and proprietary requirements addressed herein for the duration of the Order, and does not provide relief from the requirements of other federal, state, water management districts, and local agencies. This Order therefore does not negate the need to obtain any other required permits or authorizations, nor from the need to comply with all the requirements of those agencies. This Order does not provide relief from any of the requirements of the Florida Statutes regarding registered professionals.

Activities subject to Federal consistency review that are emergency actions necessary for the repair of immediate, demonstrable threats to public health or safety are consistent with the Florida Coastal Management Program if conducted in strict conformance with this Order.

**5. Stormwater Management**

Impervious surfaces that are created or altered to establish any staging areas authorized or permitted under the terms of this Order must be designed, constructed, operated, and maintained in a manner that minimizes offsite discharge of contaminated runoff, and so as to not cause adverse water quantity impacts or flooding to on-site or off-site property and receiving waters. If any impervious surfaces created under this Order must remain for more than six months, the entity operating the staging area must apply to the Department for a permit under Part IV of Chapter 373, F.S., for stormwater (quantity and quality) review and authorization, which may require further alteration of the system to meet requirements of the applicable Department surface water regulations for the area.

**6. Department Inspections**

Any person conducting activities authorized by this Order shall allow any duly authorized representative of the Department to enter and inspect the property, premises, or place where such activities are being conducted for the purpose of ascertaining the state of compliance with the terms of this Order and with the rules of the Department. Department representatives shall also be allowed to inspect and copy any records required by this Order or the rules of the Department, to inspect any monitoring equipment or method, to sample for any pollutants or waste, and to obtain any other information necessary to determine compliance with the terms of this Order and the rules of the Department.

**7. Violation of Conditions of Emergency Final Order**

Failure to comply with any condition set forth in this Order shall constitute a violation of a Department Final Order under Chapters 161, 253, 258, 373, 376, and 403, F.S., and enforcement proceedings may be brought in any appropriate administrative or judicial forum.

8. Expiration Date

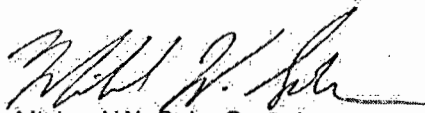
This Emergency Final Order shall take effect immediately upon execution by the Secretary of the Department, and shall expire on January 15, 2011, unless modified, revoked, or extended by further order.

**NOTICE OF RIGHTS**

Pursuant to Section 120.569(2)(n) of the Florida Statutes, any party adversely affected by this Order has the right to seek an injunction of this Order or any authorization issued hereunder in circuit court or judicial review of it under Section 120.68 of the Florida Statutes. Judicial review must be sought by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within thirty days after this Order is filed with the Clerk of the Department.

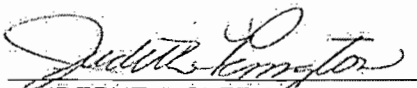
DONE AND ORDERED on this 18 day of JUNE, 2010, in Tallahassee, Florida:

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION



Michael W. Sole, Secretary  
3900 Commonwealth Blvd  
Tallahassee, FL 32399-3000

FILED ON THIS DATE PURSUANT TO § 120.52, FLORIDA STATUTES,  
WITH THE DESIGNATED DEPARTMENT CLERK, RECEIPT OF WHICH  
IS HEREBY ACKNOWLEDGED.

  
(DEPUTY) CLERK

06/18/2010  
DATE



**Exhibit A**  
**Sea Turtle Nest Protection Protocols for Clean-up Crews**  
**on Beaches in Florida, Alabama, Mississippi, and Louisiana**

In Florida and Alabama, most sandy beaches have active sea turtle nesting survey and nest protection programs in place. However, some beaches in Florida are not surveyed on a daily basis due to logistical difficulties with access (e.g., Dauphin Island in Mobile County, Alabama; the Marquesas Islands in Monroe County, Florida) or are not currently surveyed at all (e.g., Dog Island in Franklin County, Cape Sable in the Everglades in Monroe County, Florida). No nesting surveys are conducted in Mississippi and Louisiana. Attached is a list of daily surveyed beaches by County and State; please follow the first set of protocols below for these beaches. For beaches that are not surveyed, please follow the second set of protocols.

**FOR BEACHES WHERE NESTING SURVEYS ARE CONDUCTED DAILY:**

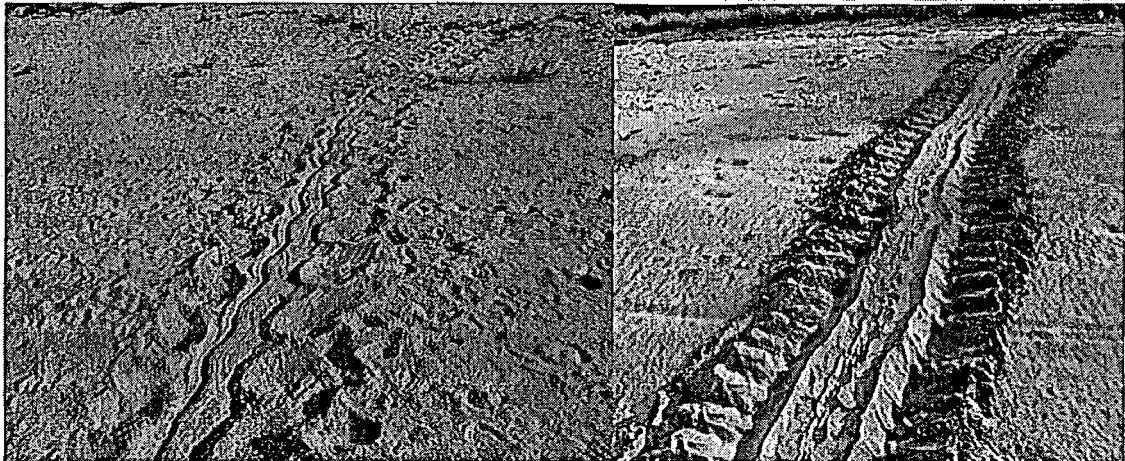
1. Ensure daily sea turtle nesting surveys have been completed and that all nests have been marked by the local sea turtle permit holder with a 10-foot buffer zone before work begins each morning. The clean-up crew leader must contact the appropriate individual identified on the attached list or his/her designee daily to determine if nesting surveys have been completed and clean-up activities can begin.
2. Sea turtles may still be nesting or hatchlings may emerge after sunrise, so it is imperative that clean-up crews watch for nesting and hatchling turtles while they are on the beach and immediately report any turtles sighted to the individual identified on the attached list or his/her designee. Clean-up vehicles should travel slowly to enable a better opportunity to spot turtle crawls and avoid colliding with nesting and hatchling turtles.
3. Look for any marked nests before beginning beach cleaning activities in an area. Nests will be marked with at least eight stakes, four around the nest perimeter and four more around a 10-foot buffer zone (see photo below). Do not remove or destroy any stakes or flagging, even if they are sited up in the dune. These may be back-up stakes that were placed to ensure that future location of the nest is possible should the nest perimeter stakes be lost.



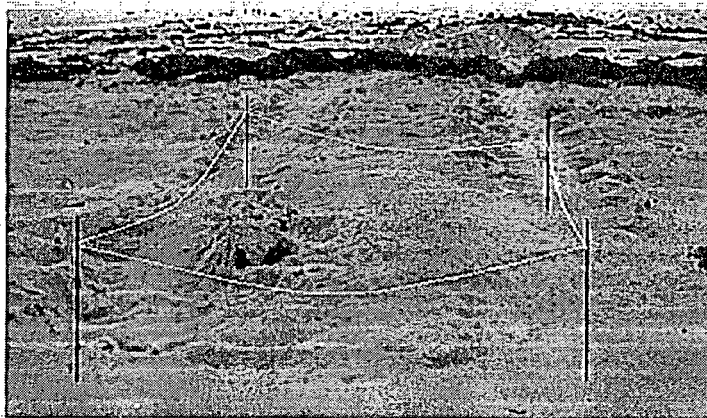
4. Mechanical equipment and hand tools should not be used within the flagged buffer area of a nest.
5. Clean-up crews should gently remove contaminated sand within the flagged area of a nest by hand and replace it with clean, damp sand taken from an area adjacent to the flagged nest area. Removal of sand over a nest should occur only under the direction of the sea turtle permit holder. The surface layer of oiled sand should be removed only to the minimum depth necessary without impacting the top of the nest. If nest flagging was removed to access the nest area, it must be securely replaced after clean-up activities have been completed.
6. All excavations and temporary alteration of beach topography shall be filled, covered, or leveled to the natural beach profile prior to 8:00 p.m. each day.

**FOR BEACHES WHERE NESTING SURVEYS ARE NOT CONDUCTED OR ARE NOT CONDUCTED DAILY:**

1. Sea turtles may still be nesting or hatchlings may emerge after sunrise, so it is imperative that clean-up crews watch for nesting and hatchling turtles while they are on the beach and immediately report any turtles sighted to the individual identified on the attached list or his/her designee. Clean-up vehicles should travel slowly to enable a better opportunity to spot turtle crawls and avoid colliding with nesting and hatchling turtles.
2. Look for any turtle crawls before beginning beach cleaning activities in an area (see photos below of turtle crawls). [In some cases, there may be marked nests on some partially surveyed beaches (steps 1-5 on the preceding page should be followed for existing nests).]



3. Follow any turtle crawls and look for signs that the turtle dug into the sand. Using stakes and flagging, mark the entire disturbed area created by a turtle digging. Under no circumstances should stakes be driven into the sand within the disturbed area created by the turtle (see photo below of a marked disturbed area – however, please double flag the nest site instead of using a single layer of flagging as shown in the photo).



4. Follow Steps 3-5 on the preceding page.

**ATTACHMENT  
SURVEYED BEACHES AND SEA TURTLE CONTACTS\***

<b>SURVEYED BEACHES</b>	<b>CONTACT NAME</b>	<b>PHONE NUMBER</b>
<b>ALABAMA</b>		
Mobile County		
Dauphin Island	Mike Reynolds	Cell: 251-747-4985 Office: 251-974-2253
Baldwin County		
Fort Morgan Peninsula, including Bon Secour National Wildlife Refuge to West Beach in Gulf Shores	Jackie Isaacs	Cell: 251-752-0654 Office: 251-540-8523
West Beach in Gulf Shores to the Alabama/Florida state line	Mike Reynolds	Cell: 251-747-4985 Office: 251-974-2253
<b>FLORIDA</b>		
Escambia County – all beaches	Robbin Trindell	Cell: 561-262-1104 Office: 850-617-6055
	Meghan Koperski (back-up)	Cell: 561-339-1001 Office: 561-575-5407 x17
Santa Rosa County – all beaches	Same as above	
Okaloosa County – all beaches	Same as above	
Walton County – all beaches	Same as above	
Bay County – all beaches	Same as above	
Gulf County – all beaches	Same as above	
Franklin County		
St. Vincent NWR (survey frequency varies)	Same as above	
Cape St. George (survey frequency varies)	Same as above	
St. George Island	Same as above	
Alligator Point		
Pinellas County – all beaches	Same as above	
Hillsborough County – all beaches	Same as above	
Manatee County – all beaches	Same as above	
Sarasota County – all beaches	Same as above	
Charlotte County – all beaches	Same as above	
Lee County – all beaches	Same as above	
Collier County – all beaches	Same as above	
Ten Thousand Islands NWR (surveyed 3-7 days/week)	Same as above	
Monroe County – all beaches (survey frequency varies)	Same as above	

\*If the beach to be cleaned is not identified on the above list or does not fall within a County where all beaches are surveyed, then clean-up crews should follow the protocols on page 2 **FOR BEACHES WHERE NESTING SURVEYS ARE NOT CONDUCTED OR ARE NOT CONDUCTED DAILY**. If you have any questions about whether a beach is surveyed or not, contact the individuals listed above for assistance.

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**Exhibit B**  
**Shorebird and Seabird Protection Protocols for Clean-up Crews on Beaches in Florida**  
**Operating Under DEP Emergency Final Order, OGC Case No. 10-1610**

Shorebirds and seabirds (beach-nesting birds) nest on Florida's beaches from February 15 – September 1. Disturbance of nesting birds may result in abandonment of nests or young. Flightless chicks can be very mobile and may forage well outside posted nesting areas. They are extremely difficult to see and are susceptible to being crushed by pedestrians and equipment.

The following measures are designed to reduce the likelihood of incidental take of protected beach-nesting bird species.

Prior to movement of vehicles or heavy equipment onto the beach associated with clean-up, notification to the Florida Fish and Wildlife Conservation Commission (FWC) Regional Species Conservation Biologist (RB) shall be provided. The RB will coordinate efforts to provide qualified FWC staff or other trained Para-professionals to act as Shorebird Monitors and assist with monitoring for beach nesting birds during clean-up. If the RB in the region can not be reached, the RB in an adjacent region should be notified.

Many bird nesting areas are marked with symbolic fencing consisting of roping (twine, string, poly rope) strung between posts (wood, PVC, Carsonite) and clearly marked signs ("No Entry"). The DEP Emergency Final Order, OGC Case No. 10-1610 does not authorize entry into designated marked beach-nesting areas. If entry is needed, authorization must be given either verbally or in writing by the FWC.

Heavy equipment and vehicles should be kept as far away from these marked areas as practicable. The posting will be erected at a sufficient distance from the nest(s) to ensure that approach does not cause the birds to flush from the nest, but will not prevent the passage of vehicles/equipment necessary to conduct the project. Should project activities require that vehicles/equipment operate (stay longer than the time it takes to transit the area) within a distance that causes birds to leave the nest, the Shorebird Monitor will assist the project manager to reduce the risks of activities resulting in nest or colony abandonment.

The Shorebird Monitor(s) can provide assistance to the operators of equipment in looking for the presence of flightless young within the project area. It is the responsibility of the project manager to ensure that equipment operators coordinate closely with the Shorebird Monitor(s) to take precautions to reduce the risk that flightless young are directly injured by equipment.

All heavy equipment and vehicles operating in areas of highest probability of beach nesting birds should operate at speed no greater than 6 mph. FWC Regional Biologists or designated Shorebird Monitors can provide guidance regarding the specific locations where slow speed is advised. When in doubt regarding the probability of the presence of beach nesting birds, it is a recommended best management practice that all vehicles and heavy equipment operate at slow speeds. Flightless young are very susceptible to mortality by becoming trapped in tire ruts in the sand. All tire ruts should be smoothed or graded at the completion of the clean-up activity each day.

## Regional FWC Contacts for Shorebird Issues

### **Northwest Region**

Dr. John Himes  
FL Fish and Wildlife Conservation  
Commission  
3911 Highway 2321  
Panama City, FL 32409-1658  
(850) 265-3677/Fax (850) 747-5690  
Cell # 850-698-4781

### **North Central Region**

Dr. Terry Doonan  
FL Fish and Wildlife Conservation  
Commission  
3377 E. US Hwy 90  
Lake City, FL 32055  
(386) 758-0525/Fax (386) 758-0533  
Cell # 386 623-4986

### **Northeast Region**

Mr. Alex Kropp  
FL Fish and Wildlife Conservation  
Commission  
1239 S.W. 10th Street  
Ocala, FL 34474-2797  
(352) 732-1225/Fax (352) 620-7627  
Cell # 352-342-0063

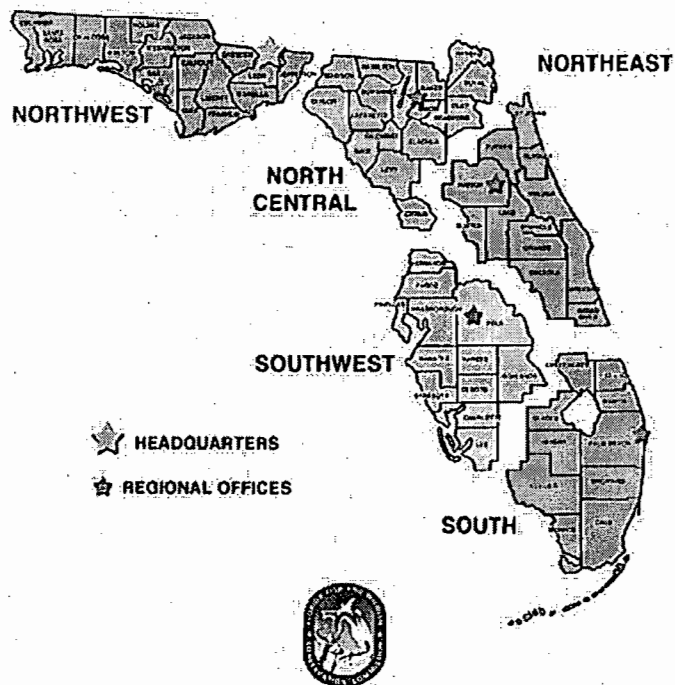
### **Southwest Region**

Ms. Nancy Douglass  
FL Fish and Wildlife Conservation  
Commission  
3900 Drane Field Road  
Lakeland, FL 33811-1299  
(863) 648-3205/Fax (863) 701-1248  
Cell # 863 581-6903

### **South Region**

Mr. Ricardo Zambrano  
FL Fish and Wildlife  
Conservation Commission  
8535 Northlake Boulevard  
West Palm Beach, FL 33412  
(561) 625-5122/Fax (561) 625-5129  
Cell # 561-248-9072

### **FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION HEADQUARTERS AND REGIONAL OFFICES**



If a Regional Biologist cannot be reached please call:

**1 888 404-3922**

# Florida Shoreline Cleanup & Assessment ARCHAEOLOGICAL SITE PROTECTION

## Artifact Identification Guide

1. HISTORIC POTTERY & GLASS



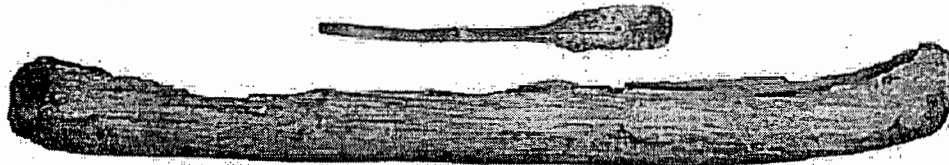
2. HISTORIC METAL(S)



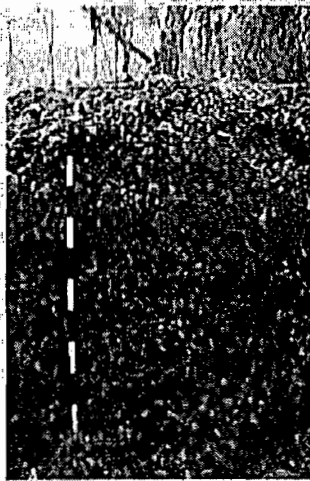
3. WOODEN VESSELS & STRUCTURES



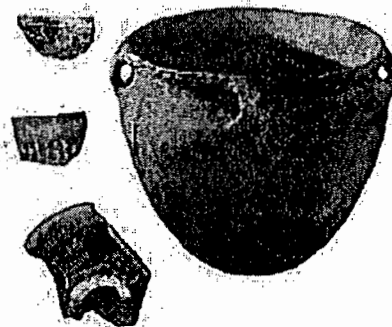
4. AMERICAN INDIAN DUGOUT CANOES



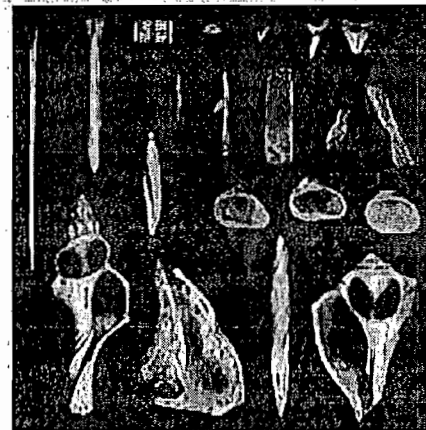
5. SHELL MIDDEN



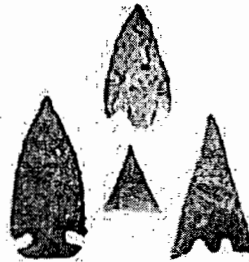
7. AMERICAN INDIAN POTTERY



8. AMERICAN INDIAN BONE & SHELL TOOLS



6. AMERICAN INDIAN  
STONE TOOLS



Archaeological sites and artifacts are owned by the State of Florida. Discovery of objects such as those illustrated here should be reported to the Division of Historical Resources at 850 245 6530. Discovery of human bones should be reported to local law enforcement immediately. **LEAVE IT AND REPORT IT!**





# Florida Shoreline Cleanup Assessment

## ARCHAEOLOGICAL SITE PROTECTION

### LEAVE IT AND REPORT IT!

Archaeological sites and artifacts found on state owned, state-controlled or submerged bottom lands are protected by law under Chapter 267.061, Florida Statutes; removal is not permitted.

Report the discovery of any archaeological material to the Division of Historical Resources at (850) 245 6530 immediately.

Human remains are protected by law under Chapter 872.05, Florida Statutes; removal is not permitted. Discovery of human bones should be reported to local law enforcement immediately.

Sites may include shipwreck, dugout canoes, or middens made of small shell, such as shown here:



1. Historic pottery and glass objects are characteristic of Florida's early European settlers beginning in the sixteenth century. Shown here are seventeenth century Spanish pottery fragments and late eighteenth to early nineteenth century glass bottles.

2. Historic metal objects also are characteristic of early Florida settlements and include various ship, weapon, and industry-related parts and fragments. Shown here are pieces associated with an eighteenth century flintlock musket.

3. Wooden vessels and structures are typically found along the coastline and commonly include shipwrecks, houses, bridges, docks, and fish weirs. Wooden objects such as these deteriorate rapidly once exposed and should never be removed from a wet environment.

4. American Indian dugout canoes can be found along Florida's coastal waterways. Wooden objects such as canoes, paddles, or carvings, deteriorate rapidly and should never be removed from a wet environment.

5. Shell middens, such as those shown here, are thick deposits of marine shell, animal bone, and soil associated with living surfaces and disposal of food refuse. Sometimes used for burials, shell middens are rich with cultural material, including organic objects, such as wood and fiber, that do not survive once removed from these settings.

6. American Indian stone tools include a wide range of chipped and ground stone objects, such as arrowheads, knives, scrapers, or drills, and are representative of human activity that extends back to Florida's earliest peoples around 10-12,000 years ago.

7. American Indian pottery objects are made with fired clay and include jars, bowls, platters, and dishes. Made in a variety of sizes with a variety of impressed and incised surface decorations, these are usually found in fragments and most commonly date between 2,500 and 500 years ago.

8. American Indian shell tools include a wide range of objects, such as hammers, cutting tools, dippers, net sinkers, anvils, gorgets, beads, and pendants; bone artifacts include arrow points, fish hooks, awls, hair pins, beads, and various carvings.

**Subject:** Nearshore Burning

**From:** Barbara Schroeder <Barbara.Schroeder@noaa.gov>

**Date:** Wed, 23 Jun 2010 17:12:12 -0400

**To:** Michael Ziccardi <mhziccardi@ucdavis.edu>, "teri.rowles@noaa.gov"  
<Teri.Rowles@noaa.gov>, Sara McNulty <Sara.McNulty@noaa.gov>, Alexis Gutierrez  
<Alexis.Gutierrez@noaa.gov>, Kyle Baker <Kyle.Baker@noaa.gov>, Robert Hoffman  
<Robert.Hoffman@noaa.gov>

----- Original Message -----

**Date:** Wed, 23 Jun 2010 16:35:34 -0400

**From:** Trindell, Robbin <robbin.trindell@MyFWC.com>

**To:** Sandy MacPherson@fws.gov <Sandy MacPherson@fws.gov>, Barbara Schroeder  
<Barbara.Schroeder@noaa.gov>, Meylan, Anne <Anne.Meylan@MyFWC.com>,  
Witherington, Blair <witherington@cfl.rr.com>

This DEP amended order (I had not seen before, don't know if FWC reviewed it) allows nearshore burning of oil. Has this been approved through incident command and what provisions are in place to survey for and to protect nesting females and other in-water animals?

--

Barbara Schroeder  
National Sea Turtle Coordinator  
National Oceanic and Atmospheric Administration - NMFS

email: [barbara.schroeder@noaa.gov](mailto:barbara.schroeder@noaa.gov)  
Phone: 301-713-2322

To cherish what remains of the earth, and to foster its renewal, is our  
only legitimate hope. Wendell Berry

second amended\_efo\_0618101.pdf

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**Content-Encoding:** base64



**Subject:** In situ burns response

**From:** Helen Golde <Helen.Golde@noaa.gov>

**Date:** Tue, 20 Jul 2010 10:38:11 -0400

**To:** Barbara Schroeder <Barbara.Schroeder@noaa.gov>, Sarah Wilkin <Sarah.Wilkin@noaa.gov>, Sara McNulty <Sara.McNulty@noaa.gov>, Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Pamela Lawrence <Pamela.Lawrence@noaa.gov>

The attached is a document that the Coast Guard attorney gave us when we were in NO. I was supposed to give a copy to Sarah Wilkin on Saturday to take back to Houma, but I forgot. So here it is.

Pam-- I will bring a hard copy to you at 11:30

-

--

Helen M. Golde  
Deputy Director  
Office of Protected Resources  
NOAA Fisheries Service  
301-713-2332 x 108

**Lawsuit PDF.pdf**

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**Content-Encoding:** base64

Meyer Glitzenstein & Crystal  
1601 Connecticut Avenue, N.W.  
Suite 700  
Washington, D.C. 20009-1056

Katherine A. Meyer  
Eric R. Glitzenstein  
Howard M. Crystal  
Joshua R. Stebbins  
William S. Eubanks II  
Jessica Almy (licensed in New York)

Telephone (202) 588-5206  
Fax (202) 588-5049  
meyerglitz@meyerglitz.com

July 13, 2010

**By Electronic Mail**

Lawson Fite  
U.S. Department of Justice  
Environment and Natural Resources Division  
Lawson.Fite@usdoj.gov

Martha Mann  
U.S. Department of Justice  
Environment and Natural Resources Division  
Martha.Mann@usdoj.gov

**Re: Comments From Independent Biologists On Draft Protocols For In-situ  
Burns – Animal Welfare Institute v. BP, Civ. No. 10-1866 (E.D. La)**

As a result of plaintiffs' lawsuit against BP and the Coast Guard seeking the creation and expeditious implementation of in-situ burn practices and protocols related to sea turtle protection, and pursuant an interim agreement entered between the parties on July 2, 2010, the Coast Guard provided plaintiffs with draft Best Management Practices ("BMPs") on July 6, 2010 for observer inclusion and for sea turtle search, rescue, and rehabilitation as part of in-situ burns. Pursuant to the interim agreement, plaintiffs and other independent sea turtle biologists are entitled to provide comments on those draft practices and protocols.<sup>1</sup>

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<sup>1</sup> The plaintiffs have consulted with many leading sea turtle biologists including Dr. Jim Spotila, Dr. Pamela Plotkin, Dr. Wallace J. Nichols, Dr. Christopher Pincetich, Jack Woody, Todd Steiner, and Mark Dodd.



Accordingly, in no particular order, the following comments constitute serious concerns raised by the independent scientific community with respect to the Coast Guard's draft protocols. These concerns should be timely addressed and incorporated into any final practices and protocols adopted by the Coast Guard and BP, in order to maximize assurances that endangered and threatened sea turtles have been removed from areas where they will be harmed, and hence to avoid further litigation over these issues:

- The BMPs and other in-situ burn protocol documents frequently use precatory language such as "if possible." Such language allows the Unified Command, the Coast Guard, and any contractors broad discretion to avoid certain obligations imposed on them under various federal laws, including the Outer Continental Shelf Lands Act ("OCSLA") and the Endangered Species Act ("ESA"). As such, precatory language of this nature should be deleted from the BMPs and related documents to ensure that each of the actors involved does not kill, harm, or harass any listed sea turtles in violation of the ESA and other pertinent federal laws.
- The BMPs indicate that the Coast Guard should catch turtles if possible before commencing burns. However, because of the rarity of these species, as well as the legal obligation of the Coast Guard and BP to comply with the ESA with respect to these listed species unless and until BP and the Coast Guard are granted an incidental take permit from NMFS pursuant to section 10 of the ESA, the BMPs must be changed to mandate that a burn cannot commence unless all turtles observed in a burn box are first caught and removed. Further, if it is impossible to remove a turtle for logistical reasons, a burn at that site should be deemed inappropriate and other oil containment strategies should be explored. Indeed, this is precisely the approach being taken by Unified Command with respect to marine mammals – if they are present in a given area, burning is not allowed.
- The protocols indicate that trained people should be used if possible. Because there are many trained sea turtle biologists on the ground in Louisiana waiting for the opportunity to join turtle search and rescue teams (and the Coast Guard has had some of these individuals' CVs and biographies for more than a week), there is no reason to allow anyone other than trained biologists to serve as observers or rescuers.
- It is critical that more biologists be permitted to assist in turtle observation, search, and rescue efforts both related to in-situ burns and otherwise as part of the oil spill response. There are many leading sea turtle experts on the ground in Venice, Louisiana and in other important Gulf locations who have not been allowed on the water despite their expertise in these issues. Such a failure to include these prominent biologists in the cleanup is irresponsible under the circumstances, and these individuals should be immediately included in any further search and rescue efforts.

- In addition to idle sea turtle biologists in the Gulf who are prepared to assist with turtle efforts, there are a number of idle boat captains in Venice, Louisiana who are similarly prepared to assist with turtle rescue efforts. The Coast Guard and Unified Command should contract with some of the idle captains (and biologists) to do search and rescue missions unrelated to burn teams in areas where turtles are expected to be found (*i.e.*, sargassum).
- It appears that most of the equipment listed on the Coast Guard's equipment sheet is for collecting and rescuing juvenile Kemp's Ridley turtles, which are much smaller than adult loggerhead and leatherback turtles. The Coast Guard must ensure that each burn team has the proper equipment to collect and rescue all turtle sizes that exist in the Gulf. Because reproductive age sea turtles are the most important to sustaining Gulf sea turtle populations, the BMPs must require that any observation and rescue teams have equipment and staff available to bring adult turtles on board (which can weigh up to 1,000 pounds for Leatherback turtles). This would include enough staff to rescue large adults, as well as boats with rear ramps or hoists and large nets to bring these adults towards the boat. Also, breakaway dip nets should be available in case they are needed.
- While having at least one observer on each burn team is a step in the right direction, plaintiffs believe that having multiple observers on the boats would increase the turtle rescue rate. Further, there should also be a dedicated wildlife boat that operates with each burn team. That boat should survey the general area (*i.e.*, the same oil line and other nearby areas where turtles would be expected) and collect any turtles that are spotted. Searching only in the burn box and immediately adjacent to the booms and burn box would mean that many oil-soaked turtles in need of attention are purposely being passed over, and such a result is not permissible in light of the ESA.
- The Coast Guard should immediately set up a Sea Turtle Rescue Task Force to be part of the Joint Incident Command. The task force should contain multiple boats for high-quality search, rescue, and rehabilitation efforts for sea turtles. Sea Turtle Rescue Task Force teams can search approximately 100-200 square miles each day, and the number of Task Force teams on the water each day must be scaled to the size of the incident response. Appropriate numbers of task force boat teams should be combined and deployed throughout the incident area to search the entire incident area each week.
- Firsthand information indicates that logistics out of Venice are difficult and basing in Destin is impractical. Thus, the Coast Guard should consider where additional efforts could be based with sea turtle rescue and protection in mind. A

ship-based team would be ideal, and there are a number of idle vessels and turtle biologists that are willing to assist with this effort.

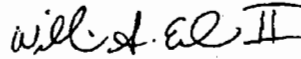
- First page/Memo to Area Unified Command: the sentence "Due to area, environmental, and situational differences amongst the unique operation areas, we recommend that the Environmental Units in the incident commands reserves the authority to amend these BMPs as they deem necessary, and have them approved by their respective commands." This statement provides too much discretion to individuals who are not turtle experts – as it is worded currently, it provides an opportunity for anyone at anytime to deviate from the BMPs and burn sea turtles in direct violation of the ESA. This sentence must be deleted.
- First page of BMP/Section on BMPs to reduce impacts to sea turtles: "Have trained observer (if available) or a crew member dedicated to looking for sea turtles (and marine mammals) during corraling operations." Observers must be required to do more than look and observe. Looking and observing will help them find adult and large juvenile turtles, but it will likely not help them find hatchling turtles. Hatchlings will often float very quietly within sargassum and other flotsam at the surface of the water column. They remain very still and will be missed from observation unless one actually "stirs" the sargassum/oil mixture to elicit a response. The observers need to literally make contact with the oil patches in the corralled area before the burn. They can do this very simply using a long pole from the boat to gently stir the sargassum/oil. Observers need to be trained to look for/observe all life stages.
- First page of BMP/Section on BMPs to reduce impacts to sea turtles: "If possible all sargassum that is not oiled or is only very lightly oiled should be avoided." This statement appears to be better placed in a BMP that identifies what areas of the Gulf should and should not be skimmed for oil, rather than in the BMP for burn operations for sea turtles and marine mammals. If, however, the intent of this statement is to avoid looking/observing for turtles in sargassum that is not oiled or lightly oiled and within the corral, it must be stricken completely. As currently written, our interpretation of this statement is that this is a directive to not search for turtles (avoid) if clean or lightly oiled sargassum is found in the corral before the burn.
- Incorporate acoustic deterrence methods before burns commence (could be mounted to the boats). Much research has been done on the effectiveness of acoustic methods to deter marine mammals and sea turtles, but these methods are not being implemented by the Coast Guard and BP as part of their burns. Such methods should be incorporated, to the extent that these methods will not themselves harass sea turtles.

- Unless and until an ITP is granted by NMFS (which would first require the Coast Guard and BP to submit an ITP application), the Coast Guard must provide plaintiffs (and preferably the public at large) with all information related to any turtles taken (killed, harmed, harassed, or otherwise taken as defined by Section 9 of the ESA) during the in-situ burn operations in the Gulf. The information should provide specific details on the species taken and the circumstances surrounding the unauthorized take.
- The rarest of these species, which also appears to be disproportionately affected by this oil spill, is the Kemp's Ridley species. Because of its rarity, and the ever-increasing number of dead turtles being collected by the Coast Guard in the Gulf due to the oil spill, Unified Command must maximize its efforts to find and remove them from the oil spill area. Any sea turtle hatchling, juvenile, or adult that is found within the oil areas, whether in clean sargassum or oiled sargassum, whether in clean water or oiled water, should be picked up and removed to a safe place. A safe place should be truly safe – not an area that will allow them back into the heavily oiled areas (and may include aquariums for the time being until the turtles can be safely returned to the Gulf or relocated to an appropriate area). The turtles should not be taken to the Atlantic Ocean because that is outside their normal development habitat and will cause long-term problems for these species.
- Any amendments to the BMPs or other protocol documents should not occur without at least 48 hours of notice to plaintiffs and an opportunity to comment on such amendments prior to incorporation.
- Because turtles can swim long distances, the concept of conducting surveys a full day in advance of a planned burn is unworkable. An area cleared on Day 1, for example, could have multiple turtles on Day 2. Thus, thorough surveys must be completed immediately prior to the burn, and burns should not commence until qualified observers are satisfied that all turtles have been removed from the area to be burned and adjacent areas.
- A survey of the area to be burned should be mandatory, and all pertinent data must be included on the observer data sheets. Those sheets must be made available to plaintiffs as soon as practicable (and preferably to the public at large via the internet) to increase the transparency of the burn operations and to ensure that all federal laws are being complied with.
- The Sea Turtle At-Sea Retrieval Protocol and the Observer Protocol contain contradictory statements about the use of a wet towel. One says that the towel should cover the turtle; one says the turtle should be on top of the towel. Please clarify this discrepancy.

- Because turtles can appear comatose for up to 24 hours when they are in fact alive, no definitive status of a particular turtle should be concluded without first having a qualified turtle veterinarian or biologist confirming that a turtle is actually dead.

Plaintiffs and the independent scientific community believe that the above comments are important considerations that should be timely adopted in any final protocols on in-situ burns by the Coast Guard, Unified Command, and/or BP. Please let me know if you have any questions.

Sincerely,



William S. Eubanks II  
Katherine A. Meyer

**Subject:** Re: RE: [Fwd: [Fwd: Fwd: FW: Inappropriate Withholding of Observer Data Sheets for In-situ Burn Operations]]

**From:** Teresa.Turk@noaa.gov

**Date:** Tue, 20 Jul 2010 20:14:24 -0400

**To:** Luke Szymanski <Luke@aisobservers.com>

**CC:** Sarah Wilkin <Sarah.Wilkin@noaa.gov>, Sara McNulty <Sara.McNulty@noaa.gov>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>

Hi All,

I will be bringing the data sheets from Tina and Michelle. If there are no other burn operations, we will have all the data sheets.

Teresa

----- Original Message -----

From: Luke Szymanski <Luke@aisobservers.com>

Date: Monday, July 19, 2010 3:46 pm

Subject: RE: [Fwd: [Fwd: Fwd: FW: Inappropriate Withholding of Observer Data Sheets for In-situ Burn Operations]]

Hello Sarah,

The observers should land at ~2100 this evening. I do not know if they will be bringing in the data sheets from the other observers. They will likely have only their own data forms. We could ask them to travel here tomorrow to debrief.

Luke

Luke Szymanski  
Marine Projects Manager  
A.I.S., Inc  
89 North Water Street  
New Bedford, MA 02740  
774-265-0596  
[www.aisobservers.com](http://www.aisobservers.com) <<http://www.aisobservers.com/>>

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From: Sarah Wilkin [mailto:[Sarah.Wilkin@noaa.gov](mailto:Sarah.Wilkin@noaa.gov)]

Sent: Mon 7/19/2010 14:29

To: Luke Szymanski

Cc: Sara McNulty; Barbara Schroeder; Teresa Turk

Subject: [Fwd: [Fwd: Fwd: FW: Inappropriate Withholding of Observer Data Sheets for In-situ Burn Operations]]

Hi Luke,

Earlier, you indicated that half of the burn teams were standing down,

and therefore some of our observers would be coming in (maintaining enough people at sea to ensure 100% coverage of the continuing burn effort). Do you have an ETA for them? Do you know if the people coming in will be bringing in all of the data sheets or only their

own?

It looks like folks need to know when we might get back some of the data



that has been collected thus far.

Thanks!  
Sarah

----- Original Message -----

Subject: [Fwd: Fwd: FW: Inappropriate Withholding of  
Observer Data  
Sheets for In-situ Burn Operations]  
Date: Mon, 19 Jul 2010 13:43:17 -0400  
From: Barbara Schroeder <Barbara.Schroeder@noaa.gov>  
To: Sarah Wilkin <Sarah.Wilkin@noaa.gov>, Teresa Turk  
<Teresa.Turk@noaa.gov>, Sara McNulty <Sara.McNulty@noaa.gov>,  
"teri.rowles@noaa.gov" <Teri.Rowles@noaa.gov>

----- Original Message -----

Subject: Fwd: FW: Inappropriate Withholding of Observer  
Data Sheets for  
In-situ Burn Operations  
Date: Mon, 19 Jul 2010 13:40:34 -0400  
From: Pamela.Lawrence@noaa.gov  
To: Barbara.Schroeder@noaa.gov, Alexis.Gutierrez@noaa.gov,  
Teri.Rowles@noaa.gov  
CC: Mark.Hodor@noaa.gov, Adam.Issenberg@noaa.gov,  
Sheila.O'Brien@noaa.gov, Cheryl.Scannell@noaa.gov

See the request from DOJ. I don't have any sense that he is  
pushing for a particular date, I think he would just like to know  
when that date is.

Let me know, thank you.

Sheila and Cheryl, I cc: you to keep you in the loop.

--

Barbara Schroeder  
National Sea Turtle Coordinator  
National Oceanic and Atmospheric Administration - NMFS

email: [barbara.schroeder@noaa.gov](mailto:barbara.schroeder@noaa.gov)  
Phone: 301-713-2322

To cherish what remains of the earth, and to foster its renewal,  
is our only legitimate hope. Wendell Berry

Re: Update on the Observers assigned to the In-situ burn teams

**Subject:** Re: Update on the Observers assigned to the In-situ burn teams

**From:** Teresa.Turk@noaa.gov

**Date:** Tue, 20 Jul 2010 20:10:32 -0400

**To:** Luke Szymanski <Luke@aisobservers.com>

**CC:** mhziccardi@ucdavis.edu, Sarah.Wilkin@noaa.gov, Sara.McNulty@noaa.gov, Alexis.Gutierrez@noaa.gov, Andrew.S.Jaeger@uscg.mil, Teri.Rowles@noaa.gov

Hey Luke,

I am just now getting on line. If it is not too late, I would ask them to write a brief report that answers those questions, details which boats they were on and for how long, and asks for any ideas on improving the communications, program, data sheets and anything else. I have asked that Michelle and Tina draft this information especially since they are having a little down time.

As we discussed on the phone, I will be disembarking the Crossmar 7 any minute now and will return to Houma very late tonight. I'll be back in the office around 1100 tomorrow.

Cheers,  
Teresa

---

Hello Teresa,

Bill Darby called me from the Crossmar 7 at ~1222 to discuss the burn teams. For the next few days they will be operating with only 6 burn teams, two monitoring vessels and a few igniter boats. Based on current conditions he does not anticipate very much burning. As such it appears that we will be able to maintain 100% observer monitoring for all burn operations with two observers. I have asked Jen Kravassi, Sonia Woodbury, and Ashley Hill to return to Venice on the next available transport. They should land this evening and will spend the night in the trailers. Depending on when you return to port we will decide the most appropriate place to debrief them. I have attached a document with a few questions that I thought we would ask the observers during the debriefing. Are there any other questions that should be asked?

Luke

Luke

Luke Szymanski  
Marine Projects Manager  
A.I.S., Inc  
89 North Water Street  
New Bedford, MA 02740  
774-265-0596  
[www.aisobservers.com](http://www.aisobservers.com)

---

**From:** Luke Szymanski

**Sent:** Sun 7/18/2010 19:40

**To:** teresa.turk@noaa.gov

**Cc:** mhziccardi@ucdavis.edu; sarah.wilkin@noaa.gov; sarah.mcnulty@noaa.gov; alexis.gutierrez@noaa.gov; Andrew.S.Jaeger@uscg.mil; Teri.Rowles@noaa.gov

**Subject:** Update

Hello, Teresa,

Here is the updated deployment sheet. With the exception of Sonja Woodbury all of the observers checked in today. According to Jen Kravassi the vessels completed search grids and all oil encountered was weathered and emulsified. Based on current projections they may return to port within a couple of days. I plan to speak with Drew Jaeger tomorrow to find out if the observers will all land on the same day or if it will be staggered a couple of days.

Luke

Last Name	First Name	Phone Number	Status	Vessel Name or Location	Assigned Taskforce	Mobilization Date	Sailed with TF	Anticipated Demob.	Est. Length (Days)
Brown	Tina	407-668-3957	At Sea, Active	Sea Fox	Task Force II	7/4/2010	7/7/2010	7/21/2010	18
Hardee	Michelle	757-339-2680	At Sea, Active	Premier Explorer	Task Force I	7/4/2010	7/7/2010	7/21/2010	18
Hill	Ashley	321-543-4094	At Sea, Active	Premier Explorer	Task Force I	7/8/2010	7/8/2010	7/22/2010	14
Kravassi	Jennifer	757-328-0341	At Sea, Active	Coastal Mariner	Task Force II	7/9/2010	7/10/2010	7/22/2010	13
Woodbury	Sonia	774-280-4541	At Sea, Active	K Marine V	Task Force III	7/9/2010	7/11/2010	7/22/2010	13
Gross	Jennifer	717-576-7353	On Site, Standby	Venice Trailers on Hwy 23	N/A	Tentative for 26 July	N/A		14
Gonzalez	Michael	503-298-0873	Scheduled to mobilize	N/A	N/A	Tentative for 26 July	N/A		14
Bonanno	Carmelina	808-443-6331	Scheduled to mobilize	N/A	N/A	Tentative for 26 July	NA		14

Luke Szymanski  
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 774-265-0596  
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**Subject:** Observer Status 7/29/10

**From:** Teresa.Turk@noaa.gov

**Date:** Thu, 29 Jul 2010 18:47:23 -0400

**To:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>, Ed Lavine <Ed.Levine@noaa.gov>, "frank.csulak" <Frank.Csulak@noaa.gov>, Helen Golde <Helen.Golde@noaa.gov>, Jordan Stout <Jordan.Stout@noaa.gov>, Kirsten Larsen <Kirsten.Larsen@noaa.gov>, Kyle Baker <Kyle.Baker@noaa.gov>, Luke Szymanski <luke@aisobservers.com>, Mike Zicarradi <mhziccardi@ucdavis.edu>, Ruth.Yender@noaa.gov, Ruth.Yender@noaa.gov, Samuel Rauch <Samuel.Rauch@noaa.gov>, Sara McNulty <Sara.McNulty@noaa.gov>, Sarah Wilkin <Sarah.Wilkin@noaa.gov>, Steve Brown <Stephen.K.Brown@noaa.gov>, Steve.Lehmann@noaa.gov, Steve.Lehmann@noaa.gov, Teri Rowles <Teri.Rowles@noaa.gov>

Hi All,

Current status of observers 7/29/10

1. The two in-situ burn observers remain on board the Crossmar 7 in case burning resumes.
2. Two nearshore observers were placed on board this morning. One observer reported a turtle sighting with a small amount of oil on the carapace. The sighting was reported via the wildlife hotline and she was not able to recover the turtle.
3. Eight observers are on board offshore skimmers. Late last night and early this morning we were able to resolve most of the insurance issues (e.g., the vessel requiring the observer to sign a hold harmless indemnification form). Fortunately we were able to deploy the remaining 4 observers to these vessels prior to the offshore fleet departing for the grounds.

Have a good evening,  
Teresa

**Subject:** Observer Status 7/30/10

**From:** Teresa.Turk@noaa.gov

**Date:** Fri, 30 Jul 2010 19:31:30 -0400

**To:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>, Ed Lavine <Ed.Levine@noaa.gov>, "frank.csulak" <Frank.Csulak@noaa.gov>, Helen Golde <Helen.Golde@noaa.gov>, Jordan Stout <Jordan.Stout@noaa.gov>, Kirsten Larsen <Kirsten.Larsen@noaa.gov>, Kyle Baker <Kyle.Baker@noaa.gov>, Luke Szymanski <luke@aisobservers.com>, Mike Zicarradi <mhziccardi@ucdavis.edu>, Ruth.Yender@noaa.gov, Ruth.Yender@noaa.gov, Samuel Rauch <Samuel.Rauch@noaa.gov>, Sara McNulty <Sara.McNulty@noaa.gov>, Sarah Wilkin <Sarah.Wilkin@noaa.gov>, Steve Brown <Stephen.K.Brown@noaa.gov>, Steve.Lehmann@noaa.gov, Steve.Lehmann@noaa.gov, Teri Rowles <Teri.Rowles@noaa.gov>

Hi All,

Current status of marine wildlife observers as of 7/30/10:

1. Two in-situ burn observers remain on board the Crossmar 7. The Crossmar 7 is scheduled to depart for the grounds on Sunday 8/1/10.
2. Eight observers are deployed on board offshore skimmers. All skimmers left port yesterday and are on the grounds actively engaged in skimming operations. The number of skimmer vessels has declined to 48 and of the 48 only 40 are on the grounds. The remaining 8 will be held at port unless a great deal more oil is released.
3. Two observers are on board nearshore skimmers and continue their daily observations.
4. We have requested an additional 5 observers be sent to LA from AIS. These observers will arrive on Sunday and we are making arrangements for training to be held on Monday in New Orleans following the same topics and procedures as was conducted on Saturday. The observers are scheduled to be deployed on Tuesday out of the Mobile office on board VIPER skimmers.

Please let me know if you have any questions.

Have a great weekend,  
Teresa

**Subject:** Observer Status 7/31/10

**From:** Teresa.Turk@noaa.gov

**Date:** Sat, 31 Jul 2010 17:59:29 -0400

**To:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>, Ed Lavine <Ed.Levine@noaa.gov>, "frank.csulak" <Frank.Csulak@noaa.gov>, Helen Golde <Helen.Golde@noaa.gov>, Jordan Stout <Jordan.Stout@noaa.gov>, Kirsten Larsen <Kirsten.Larsen@noaa.gov>, Kyle Baker <Kyle.Baker@noaa.gov>, Luke Szymanski <luke@aisobservers.com>, Mike Zicarradi <mhziccardi@ucdavis.edu>, Ruth.Yender@noaa.gov, Ruth.Yender@noaa.gov, Samuel Rauch <Samuel.Rauch@noaa.gov>, Sara McNulty <Sara.McNulty@noaa.gov>, Sarah Wilkin <Sarah.Wilkin@noaa.gov>, Steve Brown <Stephen.K.Brown@noaa.gov>, Steve.Lehmann@noaa.gov, Steve.Lehmann@noaa.gov, Teri Rowles <Teri.Rowles@noaa.gov>  
**CC:** Sara.McNulty@noaa.gov

Hi All:

Observer Status as of 7/31/10:

1. Two observers are deployed on board the in situ burn operation platform, Crossmar 7, scheduled to be sent to the grounds tomorrow morning.
2. Two nearshore observers continue to observe daily on board their vessels out of Grand Isle.
3. Eight observers are deployed on board offshore skimmers. Currently 43 offshore skimmers are on the grounds.
4. Yesterday we initiated a request to obtain 5 observers from AIS. Arrangements with the contractor for travel, housing, and training were made last night and early this morning. At 0900 we learned that the VIPER skimmers where the observers were to be stationed, were in the process of deactivation. The request for observers was then cancelled as well as the other reservations and training activities.

Have a good evening,  
Teresa

Post Observation Debrief - July 20, 2010, Summary of Debrief  
Debriefed by Sara McNulty and Luke Szymanski

Observers

Sonia Woodbury  
Jennifer Kravasso  
Ashley Hill

These notes are from a general conversational debrief with 3 observers.

Observers worked with 3 burn task forces. Berthing conditions varied amongst the 3 observers. Time on the water also varied. In general, there were 3 igniter boats per task force, and observers moved between igniter boats so that all burns would be observed.

Notable topics:

- Igniter Boat Echo – the captain (Rene) of Echo would often request to ignite when he did not have an observer on board. Protocol would often be followed and the command vessel would often require Echo to come back prior to igniting. However, this did not always happen. The observers felt that all other igniter boat captains would constantly carry an observer and they would not request to ignite without an observer on board. It was frustrating to the observers that they were not able to be on that vessel. There were burns without observers, but only off the igniter boat Echo.
- Estimated 1 out of 5 burns did not have an observer present. Unfortunately Igniter boat Echo started the most burns.
- Observers needed some guidance on what to do when not actively working on the water.
- Tyvek or Nomex suits would be a heat stressor, so no one wore suits. Clothing got oily.

Berthing:

- A06 was berthed on the Mr. Andre, with 5 men, berthed in a room with 3 men. She had no problems, always able to go into the room to change.
- A07 was berthed on a bigger vessel in a room with 4 girls – share a bathroom with 4 guys. Everyone able to shower every day.
- Observers berthed on Premier Explorer had constant internet available, Coastal Mariner had access to sat phone. Sonia was berthed on Mr. Andre, a smaller utility vessel. No internet or sat phone available. Little contact with the other vessels.
- Recommend having observers housed on the bigger vessels – for communication reasons.

Additional information the observers needed and/or suggestions for additional equipment and training?

- Better preparation on how to fill out the observer sheets.
- Communication plan – when to call, who to contact, communication between observers.
- Suggest 8 mile radius radios so observers could communicate with each other.
- Need better way to carry around the gear. Plastic bins/bags.

Protected Species Surveys and Burn Ops:

- Observers noted that they did not always stay on site for the full burn. Sometimes leave when the burn goes for a while, were not able to watch full burn. Although, observers noted that they would have seen any protected species in the burn area prior to the burn.
- Burn numbers only given to burns longer than 10 minutes. May be able to match time started with burn numbers.
- Observer was put on the igniter boat; they would circle the boom then ignite. Survey would go all the way around, stay as close to boom as possible. Giant loop around the shrimp boats and boom back to starting point. If debris in the oil, they would stop to make sure not a turtle.
- Shrimp boats no more than 200 feet apart, boom length was generally y 500 ft.
- Sight confidence - depending on the oil, might see 10 feet deep, sometimes can't see deep at all. If something popped up, you would investigate.
- Did not see any sargassum weed lines.
- A07 had one experience where the burn was started before 100% survey.
- Overall, observers felt that if a turtle was present, they would have seen it. No turtles were sighted in the burn areas.
- Being on utility vessels is a good vantage point (higher), but would not be able to rescue a turtle if sighted. Igniter boats are more maneuverable, so observers were always placed on those.

Communication:

- Sonia's boat had a Sat Phone. Needed a code to use it. Mr. Andre didn't have internet. Did not want communication across.



- Ashley had constant email access. She had a laptop.
- The people on the main ships – Sea Fox (Task Force 2) or Premier Explorer – Call on Sat Phone. Communication between observers over radio – need to get them radios

#### Sightings:

- 1 sperm whale – they were not burning that day. Flying fish, birds - kingfisher landed on boat, egret with oil on its wing, jelly fish

#### Safety:

- Air: Observers noted that they did not feel uncomfortable with the air quality; one observer specifically said that she did not feel a respirator was necessary. A07- Coughing a lot, had a headache almost every day they were out on the water. A06 – Coughed for two days.
- PPE: Hard hats worn when needed, life jackets always worn on igniter boats or on deck of larger vessels, steel toed shoes worn. Nomex was NOT used on the igniter vessels or on any vessels mainly for heat exhaustion reasons. The person igniting the fire wore gloves. Observers and crew wore jeans and t-shirts. Clothing got oiled, and was washed in a specific oiled clothing washing machine.
- Heat: Top safety concern is the sun and heat – sunburn and heat related illness were Heat was intense. Sunburn was major concern.
- Always had a safety person present for transfer from vessel to vessel. Usually somewhere to sit, something to hold on to on the small boats.

**FOIA REQUEST AND ACTION RECORD**  
(Pursuant to 5 U.S.C. 552 and 15 CFR 4)

2. Request No.  
2010-00518

PART I

3. Name, address, (phone) of requester

Claudette Juska, Research Specialist  
Greenpeace  
702 H Street, NW, Suite 300  
Washington, DC 20001  
  
(202) 462-1177

4. Description of records requested

Details of all communications regarding turtles being killed during controlled oil burns in the Gulf of Mexico following the BP Deepwater Horizon disaster, as stated in the attached request letter.

5. Request Received

Date

08/02/2010

Time

By

Marie Marks

6. \_\_\_\_\_ request returned or requester contacted: to clarify, or for other reason. Explain on reverse side of White Copy

7. Request fulfilled by facility

Date

Time

By

8. ACTION ASSIGNED TO: Mike Justen - NMFS **PR-Gary Jackson** Date: 08/02/2010

9. Due Date. By law, this request must be answered no later than: 08/30/2010

10. Comments or Instructions: **SEF/Smith + SEC/Howard, Input**  
Please return copy of response (letter only) and completed Form CD-244 to the NOAA FOIA Office, Room 10652, SSMC3. If more than 20 business days are needed, please contact the Requester directly and inform NOAA staff.

11. Received in Action Office

Date

8/2/2010

Time

By

*S. Howard*

12. Fee Provisions

- a. Without further notice, requester agrees to pay: \_\_\_\_\_ full amount, or \_\_\_\_\_ up to \$ \_\_\_\_\_.
- b. \_\_\_\_\_ Fees reduced or waived, and by whom; attach explanation; 4.9(b) applies.
- c. Notification of fees sent to requester on: \_\_\_\_\_, 19/20 \_\_\_\_\_.
- d. Payment of \$ \_\_\_\_\_ received on \_\_\_\_\_.

13. Tolling of time Provisions (see 4.9(d))

- a. \_\_\_\_\_ estimated fee exceeds authorization.
- b. \_\_\_\_\_ estimated fee exceeds \$250 and lacks authorization.
- c. \_\_\_\_\_ requester delinquent in past payments.

14. Initial Determination (Summarize per subparagraph 7.04d.3., DAO 205-14; attach another sheet if necessary; 4.6 applies.)

**SEFSC located 473 records. Attached Search Clearance forms reflect Releasable & Non-Releasable records.** **1 CD** *submit*  
**8/9/11 - 100 pages records - Son Carlson (SEC-Panama City)**

14.a. Clearance Official(s)

Name:

Office Title:

Date:

15. Collectible Cost per Fee Schedule (4.9(b))

	Estimated	Actual
Search fee	\$ _____	\$ _____
Copying fee	_____	_____
Review	_____	_____
Total Collectible	\$ <u>0.00</u>	\$ <u>0.00</u>

16. Non-collectible Costs

17. Action Office

Signature

*[Signature]*

Position Title

*FOIA Coordinator*

Date

8/9/11  
5/25/11

*Closed for the SEC.*

I can't access? can you?

On Jun 30, 2010, at 9:55 AM, Alexis Gutierrez wrote:

**From:** Mark Dodd <[Mark.Dodd@dnr.state.ga.us](mailto:Mark.Dodd@dnr.state.ga.us)>  
**Date:** June 24, 2010 9:02:31 PM CDT  
**To:** [Alexis.Gutierrez@noaa.gov](mailto:Alexis.Gutierrez@noaa.gov)  
**Cc:** [Sara.McNulty@noaa.gov](mailto:Sara.McNulty@noaa.gov)  
**Subject:** photos

-----  
Alexis,

I have uploaded some photos from my time with the burn unit to Georgia DNR's ftp site. I still cannot get the video loaded. Sorry. I will keep trying.

Go to <ftp://ftpx.state.dnr.ga.us>

go to page and click open ftp site with windows explorer

Username: 

Password: 

Look in the amackinnon folder for photos  
(Adam Mackinnon is my technician)

The photo entitled "material in the boom at ignition" is helpful. The photo shows approx. half of the u-shaped boom, you can see one end of the boom in the background. Usually they try to burn if the boom is half full of material which you can see in the photo. The photo gives you a sense of how easy it would be to survey the material from the ignition boat before burning. It would be very similar to surveying a weedline.

The photo "trawlers with boom 2" gives you a sense of how the trawlers and boom work. You can imagine the trawlers moving ahead at ½ knot. My impression is that the trawlers are too far apart for an observer on one of the trawlers to survey all the material moving past into the boom. It makes more sense to have an observer in the ignition boat.

The other photos speak for themselves.

Could you forward this to Barbara and Blair. Also, please let me know if

when you get this. I am having trouble with my e-mail. Thanks.

Mark

Mark G. Dodd  
Georgia Sea Turtle Program Coordinator  
Georgia Department of Natural Resources  
One Conservation Way  
Brunswick, GA 31520-8687  
Office (912) 280-6892  
Cell (912) 269-4019  
email: [Mark\\_Dodd@dnr.state.ga.us](mailto:Mark_Dodd@dnr.state.ga.us)

From: John Carlson <John.Carlson@noaa.gov>  
Subject: **NMFS-approved observers**  
Date: July 1, 2010 1:00:51 PM CDT  
To: David Bernhart <david.bernhart@noaa.gov>, robert.hoffman@noaa.gov  
Cc: Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, lukes@aisobservers.com,  
James Nance <James.M.Nance@noaa.gov>, eric.hawk@noaa.gov,  
barbara.schroeder@noaa.gov



Bob/David

Two questions:

Do we want the observers deployed on skimmer or burn vessels to monitor turtle take in the oil spill areas to be qualified as "NMFS-approved".. As a background, all "NMFS-approved" observers must undertake a standard AMSEA at-sea safety course, possess 1st aid and CPR certification, and in these circumstances have the 24 hr HAZWOPPER course. This training normally takes 3-5 days.

How flexible do we want the qualifications for these "observers" to be?

Second question, what are you looking at for a level of coverage. Putting on my science hat are you looking for levels equal to that that would give us a take estimate with a CV=0.3?

John

-----  
John K. Carlson, Ph.D.  
NOAA Fisheries Service  
Southeast Fisheries Science Center  
3500 Delwood Beach Rd.  
Panama City, FL 32408  
850-234-6541 ext 221  
john.carlson@noaa.gov

From: John Carlson <John.Carlson@noaa.gov>  
Subject: **Fwd: NMFS-approved observers**  
Date: July 1, 2010 1:32:29 PM CDT  
To: Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>



► 1 Attachment, 0.3 KB

fyi.

Begin forwarded message:

**From:** "Eric G. Hawk" <Eric.Hawk@noaa.gov>  
**Date:** July 1, 2010 1:29:59 PM CDT  
**To:** John Carlson <John.Carlson@noaa.gov>  
**Cc:** David Bernhart <David.Bernhart@noaa.gov>, Robert Hoffman <Robert.Hoffman@noaa.gov>  
**Subject:** **Re: NMFS-approved observers**

John, I will answer for David and Bob, and they can correct me if necessary. We DON'T want the observers deployed on skimmer or burn vessels to monitor turtle take in the oil spill areas to be qualified as "NMFS-approved." Seems like stupendous overkill. FYI, our definition of NMFS-approved observers, which we require for endangered species observers aboard hopper dredges, is very different from yours. Our is only that they undergo a screening for their expertise in sea turtle identification, experience with stranding networks, academic qualifications, etc. We used to review their credentials/resumes here at SER, then we did it jointly with NER, now we let them do it.

**There is no requirement for first aid, safety-at-sea, HAZWOPER, etc., and no need either.** The COE knows that any ESO's on board hopper dredges have to be previously "NMFS-approved", as per the terms of the biops (and our PRD definition of "approved" is not the same as the one you just gave).

In summary, we would not require all that stuff just for guys deployed on skimmer or burn vessels.

John Carlson wrote:

Bob/David

Two questions:

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Panama City, FL 32408  
850-234-6541 ext 221  
[john.carlson@noaa.gov](mailto:john.carlson@noaa.gov)



[eric\\_hawk.vcf \(0.3 KB\)](#)

From: John Carlson <John.Carlson@noaa.gov>  
Subject: **Re: NMFS-approved observers**  
Date: July 1, 2010 1:50:30 PM CDT  
To: "Eric G. Hawk" <Eric.Hawk@noaa.gov>  
Cc: David Bernhart <David.Bernhart@noaa.gov>, Robert Hoffman  
<Robert.Hoffman@noaa.gov>, Alexis Gutierrez  
<Alexis.Gutierrez@noaa.gov>



irrespective of the category of "NMFS approved observer", we have standard requirements and training we employ to ensure the individuals are "safe" when they are at sea. if I understand you correctly, are you proposing that individuals we place on skimmer or burn vessels have no "safety" training what so ever?

On Jul 1, 2010, at 1:29 PM, Eric G. Hawk wrote:

John, I will answer for David and Bob, and they can correct me if necessary. We DON'T want the observers deployed on skimmer or burn vessels to monitor turtle take in the oil spill areas to be qualified as "NMFS-approved." Seems like stupendous overkill. FYI, our definition of NMFS-approved observers, which we require for endangered species observers aboard hopper dredges, is very different from yours. our is only that they undergo a screening for their expertise in sea turtle identification, experience with stranding networks, academic qualifications, etc. We used to review their credentials/resumes here at SER, then we did it jointly with NER, now we let them do it. **There is no requirement for first aid, safety-at-sea, HAZWOPER, etc., and no need either.** The COE knows that any ESO's on board hopper dredges have to be previously "NMFS-approved", as per the terms of the biops (and our PRD definition of "approved" is not the same as the one you just gave).

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From: John Carlson <John.Carlson@noaa.gov>  
Subject: **Re: NMFS-approved observers**  
Date: July 1, 2010 3:30:45 PM CDT  
To: "Eric G. Hawk" <Eric.Hawk@noaa.gov>  
Cc: David Bernhart <David.Bernhart@noaa.gov>, Robert Hoffman  
<Robert.Hoffman@noaa.gov>, Alexis Gutierrez  
<Alexis.Gutierrez@noaa.gov>



obviously with already trained observers the issue of training is irrelevant. my concern was any new hires with no training and how much training they would need given the task.

On Jul 1, 2010, at 2:12 PM, Eric G. Hawk wrote:

John,  
Not exactly. It is my understanding that these observers are needed immediately in part because of concerns that in-situ burning is allegedly currently frying sea turtles. Heard that story related by the Venice LA shrimp boat captain on U-tube and also heard that it was corroborated by Blair Witherington, but have not spoken with Blair. So, what is the on scene-situation? Are there currently-existing up-and-running mechanisms to train these people "properly", i.e., to meet your definition of NMFS-approved, quickly? If there are enough people already trained to the "NMFS-approved" spec to respond to the current needs, then I would use them. In the absence of individuals having that level of "expertise" and if the need is great and immediate, then I am saying that all that training is not necessary and could be given at a later date, perhaps after their first rotation. Certainly we want people to be safe at sea, but, mandatory first-aid training, is that really necessary? HAZWOPER is necessary, clearly, but how much? A briefing on safety at sea, and knowing how to climb into a survival suit, is important, and how to avoid contacting/contaminating oneself or others with oil is certainly in order pre-deployment. Aside from the HAZWOPER, that's all that visiting scientists on NOAA ships are required, the last time I checked. I would fill the necessary vacancies that need immediate filling,, and then start the training, but not delay the deployment of observers until they all have have all the training. Is that workable?.

John Carlson wrote:

irrespective of the category of "NMFS approved observer", we have standard requirements and training we employ to ensure the individuals are "safe" when they are at sea. if I understand you correctly, are you proposing that individuals we place on skimmer or burn vessels have no "safety" training what so ever?

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850-234-6541 ext 221  
[john.carlson@noaa.gov](mailto:john.carlson@noaa.gov)

<eric\_hawk.vcf>

<eric\_hawk.vcf>

From: John Carlson <John.Carlson@noaa.gov>  
Subject: **Re: Skimmer Forms**  
Date: July 2, 2010 11:46:43 AM CDT  
To: Mark Dodd <Mark.Dodd@dnr.state.ga.us>

► 2 Attachments, 294 KB



Mark



Marine Speci...doc (32.0 KB)Marine Speci...doc (262 KB)  
data sheets and documentation attached

here is my FTP site: <http://public.me.com/jc0521>

thanks for your help

John

On Jul 2, 2010, at 11:34 AM, Mark Dodd wrote:

John or Luke,

I am working on a powerpoint for in-situ burn team observer training. Could you send me your most recent version of the data sheet? Thanks.

Mark

Mark G. Dodd  
Georgia Sea Turtle Program Coordinator  
Georgia Department of Natural Resources  
One Conservation Way  
Brunswick, GA 31520-8687  
Office (912) 280-6892  
Cell (912) 269-4019  
email: Mark\_Dodd@dnr.state.ga.us

||| John Carlson <John.Carlson@noaa.gov> 6/30/2010 5:54 PM >>>  
Luke and I have modified the observer data form based on discussion we have had today. let me know if you have any comments

The information contained herein is confidential and should be submitted to NOAA Resources at Risk Environmental Unit: [nmfe.ser.emergency.consult@noaa.gov](mailto:nmfe.ser.emergency.consult@noaa.gov).

<b>MARINE SPECIES OBSERVATION FORM</b>		ANIMALS SIGHTED: Y OR N	
		ANIMALS RETRIEVED: Y OR N	
OBSERVER #:		PAGE ____ OF ____	
TRIP #:		DATE (MM/DD/YY):	
SURVEY #:		SKIMMER TYPE:	
OBSERVATION PLATFORM:			
<b>LOCATION</b>			
	START LAT/LONG (DD.MM.mmm)		START TIME(24hr)
	END LAT/LONG (DD.MM.mmm)		END TIME(24hr)
SOURCE <input type="checkbox"/> NON-SOURCE <input type="checkbox"/> NEAR SHORE <input type="checkbox"/> BEACH <input type="checkbox"/>			
<b>TARGET OIL</b>		<b>HABITAT TYPES</b>	
HEAVY (dark black/brown) <input type="checkbox"/>		SARGASSUM WEEDLINE: OIL <input type="checkbox"/> NO OIL <input type="checkbox"/> OIL LINE NO SARGASSUM <input type="checkbox"/>	
MEDIUM (brown to peanut color) <input type="checkbox"/>		DISPERSED SARGASSUM: OIL <input type="checkbox"/> NO OIL <input type="checkbox"/> OTHER:	
LIGHT (silver/rainbow sheen, metallic brn) <input type="checkbox"/>		HEAVY CONTINUOUS OIL NO SARGASSUM <input type="checkbox"/>	
Emulsified (orange) <input type="checkbox"/>		DISPERSED PATCHES OF OIL NO SARGASSUM <input type="checkbox"/>	
LENGTH OF BOOM (FT):		SKIRT HIEGHT (INCHES):	
START BURN TIME (24hr):	WEATHER DESCRIPTION	VISIBILITY (FT):	
		SEA STATE:	

## ANIMAL OBSERVATION SUMMARY

ANIMAL TYPE	NUMBER OF ANIMALS	
	ALIVE	DECEASED
Sea turtles		
Dolphins		
Whales		
Manatees		
Sea birds		
Other (Specify):		

The information contained herein is confidential and should be submitted to NOAA Resources at Risk  
 Environmental Unit: [nmfe.ser.emergency.consult@noaa.gov](mailto:nmfe.ser.emergency.consult@noaa.gov).

SIGHTING AND RETRIEVALS- ADDITIONAL INFORMATION							
SPEC. #	SPECIES	CONDITION	PHOTOS (Y OR N)	LATITUDE	LONGITUDE	SURVEY PHASE	Comment (Y or N)

**COMMENTS** (Describe any interactions with equipment, species identification characteristics, behavioral characteristics, ect.):

SPECIMEN DELIVERY INFORMATION		
Date Speciment Delivered	Vessel/Organization Name	Name of Individual Receiving

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**Animals Sighted:** Circle yes or no to indicate if any animals were sighted during surveys associated with marine operations.

**Animals Retrieved:** Circle yes or no to indicate if any animals were retrieved during the course of the marine operation.

**Observer #:** This is a unique number assigned to each observer by the contractor. e.g. C45

**Page \_\_\_\_ of \_\_\_\_:** This field is used link all documents associated with each marine operation. Pages should be numbered consecutively and arranged in the order that sightings or retrievals occur during each survey.

**Trip #:** Trip numbers will be three digit numbers designated by the number of trips the observer has completed as part of this program. For example observer C45's first trip will be 001, the second trip will be 002 and so forth.

**Survey #:** This is a three digit number assigned by the observer on a trip basis for each of the surveys completed during a trip. A survey is an observation event focused on a single marine effort such as surface skimming or surface burning.

**Date:** Enter the date that the survey is commenced.

**Vessel Name:** Indicate the name of the vessel from which observations are being completed.

**Type:** Indicate the type of vessel from which the observations are being completed.

**Location:** The fields contained in this section of the data form will capture the start and end position and time relative to the survey platform in which the observer is completing the visual observation and species retrieval. Additional elements such as general location, qualitative description of the oil and habitat type will also be recorded by checking the most appropriate box.

**Length of Boom:** Recorded in feet this figure should be obtained by asking the Captains of the vessels towing the boom or from the burn team.

**Skirt Height:** Recorded in inches this field should be obtained from the Captains of the vessels towing the boom or from the burn team.

**Start Burn Time:** Using the 24hour clock format record the time that the burn in initiated by the burn team.

**Weather Description:** Indicate one of the following weather conditions: unknown, clear, partly cloudy, continuous layer of clouds, drizzle, rain, showers, thunderstorms, rain and fog, fog or thick haze, or other with a description in the comments section.

**Visibility:** Estimate in feet the distance of clear visibility across the survey area.

**Sea State:** Using the Beaufort scale describe the sea state present during the survey.

**Animal Observation Summary:** This section is used to summarize the condition of each type of animal encountered during a survey.

**Sighting and Retrieval-Additional Information:** This section is used to log each specimen encountered during the survey.

**Spec. #:** Indicate the three digit specimen number assigned by the observer on a per survey basis for each animal sighted and/or retrieved during the survey.

**Species:** Indicate the common name of the species sighted and/or retrieved.

**Condition:** Note whether the animal was alive "A", deceased "D", or unknown "UK" upon sighting and separated by a hyphen whether the animal was retrieved "R" or stayed "S" at sea. For example if a live animal is encountered and it is retrieved the observer would indicate A-R in the condition field. If the animal is not retrieved and stays at sea the observer must use the comment section to describe the circumstances for leaving the animal at sea.

**Photos:** Indicate with a "Y" or "N" if digital images of the specimen were taken.

**Latitude and Longitude:** Using the format of DD.MM.mmm indicate the position of the vessel when the animal is retrieved. In the event that an animal is not retrieved indicate the position of the survey vessel, approximate the distance to the animal in feet and indicate the information in the comment section.

**Survey phase:** Indicate one of the following:

1. survey of material in front of trawlers
2. survey of material in boomed area
3. survey of material trawling behind boom

**Comments:** Indicate with a "Y" or a "N" whether comments have been included pertaining to the specimen.

**Comments:** This section should be used to document all observed interactions between animals and gear, list key identification characteristics, to describe behavioral characteristics and any other notable information pertaining to the survey. All information relative to a specimen should be identified by the specimen number.

**Specimen Delivery Information:** This section is used to document the chain of custody for all specimens that are either transferred at sea or delivered to a shore based facility.

**Date Specimen Delivered:** Indicate the data that the specimen was transferred or delivered (mm/dd/yy).

**Vessel/Organization Name:** Indicate the name of the vessel or organization that receives the specimen.

**Name of Receiving Individual:** Indicate the name of the individual that takes possession of the specimen.



From: John Carlson <John.Carlson@noaa.gov>  
Subject: **Re: Please send me the GA recommendations ASAP**  
Date: July 2, 2010 4:00:41 PM CDT  
To: Joe Dillon <Joseph.J.Dillon@noaa.gov>  
Cc: Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>  
▶ 3 Attachments, 316 KB



Joe

observer protocol attached with data sheets and documentation

John



Marine Speci...doc (32.0 KB)



Marine Speci...doc (262 KB)



Observer pr...doc (22.5 KB)

On Jul 2, 2010, at 3:19 PM, Joe Dillon wrote:

Thanks. I've included the Hoffman e-mail that I spoke about today. Hopefully there isn't too much more than what is here. So much for getting one system set up and avoiding duplication of effort!! The best laid plans . . .

---

**From:** John Carlson [<mailto:John.Carlson@noaa.gov>]  
**Sent:** Friday, July 02, 2010 3:10 PM  
**To:** Joe Dillon  
**Cc:** Alexis Gutierrez  
**Subject:** Re: Please send me the GA recommendations ASAP

John

I'm working on finalizing the observer protocol and will email it asap

John

-----  
John K. Carlson, Ph.D.  
NOAA Fisheries Service  
Southeast Fisheries Science Center  
3500 Delwood Beach Rd.  
Panama City, FL 32408  
850-234-6541 ext 221  
[john.carlson@noaa.gov](mailto:john.carlson@noaa.gov)

On Jul 2, 2010, at 2:48 PM, Joe Dillon wrote:

Hi John,

I've got the BMPs that Bob Hoffman developed pulled up. Can you please send me the GA biologist recommendations so that I can compare them?

Thank you!!!

Joe

<Hoffman email 6-15-10.pdf>

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		ANIMALS RETRIEVED: Y OR N	
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TRIP #:		DATE (MM/DD/YY):	
SURVEY #:		SKIMMER TYPE:	
OBSERVATION PLATFORM:			
<b>LOCATION</b>			
	START LAT/LONG (DD.MM.mmm)		START TIME(24hr)
	END LAT/LONG (DD.MM.mmm)		END TIME(24hr)
SOURCE <input type="checkbox"/> NON-SOURCE <input type="checkbox"/> NEAR SHORE <input type="checkbox"/> BEACH <input type="checkbox"/>			
<b>TARGET OIL</b>		<b>HABITAT TYPES</b>	
HEAVY (dark black/brown) <input type="checkbox"/>		SARGASSUM WEEDLINE: OIL <input type="checkbox"/> NO OIL <input type="checkbox"/>	OIL LINE NO SARGASSUM <input type="checkbox"/>
MEDIUM (brown to peanut color) <input type="checkbox"/>		DISPERSED SARGASSUM: OIL <input type="checkbox"/> NO OIL <input type="checkbox"/> OTHER:	
LIGHT (silver/rainbow sheen, metallic brn) <input type="checkbox"/>		HEAVY CONTINUOUS OIL NO SARGASSUM <input type="checkbox"/>	
Emulsified (orange) <input type="checkbox"/>		DISPERSED PATCHES OF OIL NO SARGASSUM <input type="checkbox"/>	
LENGTH OF BOOM (FT):		SKIRT HIEGHT (INCHES):	
START BURN TIME (24hr):	WEATHER DESCRIPTION	VISIBILITY (FT):	
		SEA STATE:	

## ANIMAL OBSERVATION SUMMARY

ANIMAL TYPE	NUMBER OF ANIMALS	
	ALIVE	DECEASED
Sea turtles		
Dolphins		
Whales		
Manatees		
Sea birds		
Other (Specify):		

The information contained herein is confidential and should be submitted to NOAA Resources at Risk  
 Environmental Unit: [nmfe.ser.emergency.consult@noaa.gov](mailto:nmfe.ser.emergency.consult@noaa.gov).

SIGHTING AND RETRIEVALS- ADDITIONAL INFORMATION							
SPEC. #	SPECIES	CONDITION	PHOTOS (Y OR N)	LATITUDE	LONGITUDE	SURVEY PHASE	Comment (Y or N)

**COMMENTS** (Describe any interactions with equipment, species identification characteristics, behavioral characteristics, ect.):

SPECIMEN DELIVERY INFORMATION		
Date Speciment Delivered	Vessel/Organization Name	Name of Individual Receiving

## OBSERVER PROTOCOL

A Burn Unit includes a pair of trawlers pulling a boom, an ignition boat, and a support vessel (crew boat). As part of the general oil collection operations paired trawlers pull a 500' boom at approximately 0.5 knots to concentrate oil for burning. Once ignition boat personnel determine the oil is ready for ignition, a sea turtle survey will be initiated.

The observer will be stationed on the ignition boat and conduct the survey from a position that optimizes visibility. A general header data collection sheet (attachment 1) will be filled out by the observer that includes information on the time survey begins, location, sea state, a general description of the oil and habitat, and unique information to track the survey data.

A sea turtle survey includes monitoring of 3 areas prior to the burn including; the area in front of the trawlers, oil concentrated in the boom, and any oil trailing behind the boom. As part of the survey, observers will note the type of oil encountered during the survey, the type of habitat (e.g. sea weed or other aquatic vegetation) encountered during the survey.

Sea turtles that cannot be captured due to their proximity to the booms or edge of the oil spill will be recorded as mortalities. Sea turtles encountered during the survey that can be removed from the oil will be captured with a dip net. The sea turtle will be boarded and the observer will provide a cursory assessment of its status. Data relative to condition, location, and survey phase will be recorded. Sea turtles will be placed in a confined area and covered with a wet towel to minimize stress if the animal is alive. The sea turtle will be transported to the support vessel and the observer will notify the support vessel to transport the sea turtle back to land.



From: John Carlson <John.Carlson@noaa.gov>  
Subject: **Fwd: Please send me the GA recommendations ASAP**  
Date: July 2, 2010 4:37:50 PM CDT  
To: lukes@aisobservers.com



► 3 Attachments, 316 KB

Begin forwarded message:

**From:** Joe Dillon <[Joseph.J.Dillon@noaa.gov](mailto:Joseph.J.Dillon@noaa.gov)>  
**Date:** July 2, 2010 4:21:57 PM CDT  
**To:** [patrick.j.grace@uscg.mil](mailto:patrick.j.grace@uscg.mil), [daine.h.breithaupt@uscg.mil](mailto:daine.h.breithaupt@uscg.mil)  
**Cc:** 'David Bernhart' <[David.Bernhart@noaa.gov](mailto:David.Bernhart@noaa.gov)>, 'Alexis Gutierrez' <[Alexis.Gutierrez@noaa.gov](mailto:Alexis.Gutierrez@noaa.gov)>, 'Teri Rowles' <[Teri.Rowles@noaa.gov](mailto:Teri.Rowles@noaa.gov)>, [Jessica.Powell@noaa.gov](mailto:Jessica.Powell@noaa.gov), 'John Carlson' <[John.Carlson@noaa.gov](mailto:John.Carlson@noaa.gov)>, [Elizabeth.Jones@noaa.gov](mailto:Elizabeth.Jones@noaa.gov), 'Ed Levine' <[Ed.Levine@noaa.gov](mailto:Ed.Levine@noaa.gov)>, [Charlie.Henry@noaa.gov](mailto:Charlie.Henry@noaa.gov), [William.Whitmore@noaa.gov](mailto:William.Whitmore@noaa.gov), 'Robert Hoffman' <[Robert.Hoffman@noaa.gov](mailto:Robert.Hoffman@noaa.gov)>  
**Subject:** **FW: Please send me the GA recommendations ASAP**

Patrick and Diane,

Attached are the observer protocols with datasheets and documentation as well as the Best Management Practices transmitted to the Environmental Unit at the Unified Command on 6-15-10. These documents seem perfectly compatible with each other although I suggest clarifying with John Carlson and Alexis Gutierrez on the two observation forms. They may want to incorporate the "water oiling condition" data gathering requirement onto the more recently developed form.

I only have Bob's BMPs as a pdf I'm afraid, but I suggest presenting all this to the plaintiffs as the plan to minimize harm to sea turtles from in-situ burning.

Thank you,  
Joe Dillon

---

**From:** John Carlson [<mailto:John.Carlson@noaa.gov>]  
**Sent:** Friday, July 02, 2010 4:01 PM  
**To:** Joe Dillon  
**Cc:** Alexis Gutierrez  
**Subject:** Re: Please send me the GA recommendations ASAP

Joe

observer protocol attached with data sheets and documentation

John



Marine Speci...doc (32.0 KB)



Marine Speci....doc (262 KB)



Observer pr....doc (22.5 KB)

On Jul 2, 2010, at 3:19 PM, Joe Dillon wrote:

Thanks. I've included the Hoffman e-mail that I spoke about today. Hopefully there isn't too much more than what is here. So much for getting one system set up and avoiding duplication of effort!! The best laid plans . . .

---

**From:** John Carlson [<mailto:John.Carlson@noaa.gov>]  
**Sent:** Friday, July 02, 2010 3:10 PM  
**To:** Joe Dillon  
**Cc:** Alexis Gutierrez  
**Subject:** Re: Please send me the GA recommendations ASAP

John

I'm working on finalizing the observer protocol and will email it asap

John

---

John K. Carlson, Ph.D.  
NOAA Fisheries Service  
Southeast Fisheries Science Center  
3500 Delwood Beach Rd.  
Panama City, FL 32408

## OBSERVER PROTOCOL

A Burn Unit includes a pair of trawlers pulling a boom, an ignition boat, and a support vessel (crew boat). As part of the general oil collection operations paired trawlers pull a 500' boom at approximately 0.5 knots to concentrate oil for burning. Once ignition boat personnel determine the oil is ready for ignition, a sea turtle survey will be initiated.

The observer will be stationed on the ignition boat and conduct the survey from a position that optimizes visibility. A general header data collection sheet (attachment 1) will be filled out by the observer that includes information on the time survey begins, location, sea state, a general description of the oil and habitat, and unique information to track the survey data.

A sea turtle survey includes monitoring of 3 areas prior to the burn including; the area in front of the trawlers, oil concentrated in the boom, and any oil trailing behind the boom. As part of the survey, observers will note the type of oil encountered during the survey, the type of habitat (e.g. sea weed or other aquatic vegetation) encountered during the survey.

Sea turtles that cannot be captured due to their proximity to the booms or edge of the oil spill will be recorded as mortalities. Sea turtles encountered during the survey that can be removed from the oil will be captured with a dip net. The sea turtle will be boarded and the observer will provide a cursory assessment of its status. Data relative to condition, location, and survey phase will be recorded. Sea turtles will be placed in a confined area and covered with a wet towel to minimize stress if the animal is alive. The sea turtle will be transported to the support vessel and the observer will notify the support vessel to transport the sea turtle back to land.

The information contained herein is confidential and should be submitted to NOAA Resources at Risk Environmental Unit: [nmfe.ser.emergency.consult@noaa.gov](mailto:nmfe.ser.emergency.consult@noaa.gov).

<b>MARINE SPECIES OBSERVATION FORM</b>		ANIMALS SIGHTED: Y OR N	
		ANIMALS RETRIEVED: Y OR N	
OBSERVER #:		PAGE ____ OF ____	
TRIP #:		DATE (MM/DD/YY):	
SURVEY #:		SKIMMER TYPE:	
OBSERVATION PLATFORM:			
<b>LOCATION</b>			
	START LAT/LONG (DD.MM.mmm)		START TIME(24hr)
	END LAT/LONG (DD.MM.mmm)		END TIME(24hr)
SOURCE <input type="checkbox"/> NON-SOURCE <input type="checkbox"/> NEAR SHORE <input type="checkbox"/> BEACH <input type="checkbox"/>			
<b>TARGET OIL</b>		<b>HABITAT TYPES</b>	
HEAVY (dark black/brown) <input type="checkbox"/>		SARGASSUM WEEDLINE: OIL <input type="checkbox"/> NO OIL <input type="checkbox"/>	OIL LINE NO SARGASSUM <input type="checkbox"/>
MEDIUM (brown to peanut color) <input type="checkbox"/>		DISPERSED SARGASSUM: OIL <input type="checkbox"/> NO OIL <input type="checkbox"/>	OTHER:
LIGHT (silver/rainbow sheen, metallic brn) <input type="checkbox"/>		HEAVY CONTINUOUS OIL NO SARGASSUM <input type="checkbox"/>	
Emulsified (orange) <input type="checkbox"/>		DISPERSED PATCHES OF OIL NO SARGASSUM <input type="checkbox"/>	
LENGTH OF BOOM (FT):		SKIRT HIEGHT (INCHES):	
START BURN TIME (24hr):	WEATHER DESCRIPTION	VISIBILITY (FT):	
		SEA STATE:	

## ANIMAL OBSERVATION SUMMARY

ANIMAL TYPE	NUMBER OF ANIMALS	
	ALIVE	DECEASED
Sea turtles		
Dolphins		
Whales		
Manatees		
Sea birds		
Other (Specify):		

The information contained herein is confidential and should be submitted to NOAA Resources at Risk Environmental Unit: [nmfe.ser.emergency.consult@noaa.gov](mailto:nmfe.ser.emergency.consult@noaa.gov).

## SIGHTING AND RETRIEVALS- ADDITIONAL INFORMATION

SPEC. #	SPECIES	CONDITION	PHOTOS (Y OR N)	LATITUDE	LONGITUDE	SURVEY PHASE	Comment (Y or N)

**COMMENTS** (Describe any interactions with equipment, species identification characteristics, behavioral characteristics, ect.):

## SPECIMEN DELIVERY INFORMATION

Date Speciment Delivered	Vessel/Organization Name	Name of Individual Receiving

The Marine Species Observation Form has been developed to document information pertaining to the sightings and retrieval of marine species during at-sea operations. The data forms are to be completed by the observer during each dedicated survey. The form will be used for all marine operations involving visual observers. In the event that a field is not applicable indicate this by writing "N/A". In the event that information is unobtainable or unknown write "UK" in the corresponding field and describe the circumstances in the comment section of the data form.

**Animals Sighted:** Circle yes or no to indicate if any animals were sighted during surveys associated with marine operations.

**Animals Retrieved:** Circle yes or no to indicate if any animals were retrieved during the course of the marine operation.

**Observer #:** This is a unique number assigned to each observer by the contractor. e.g. C45

**Page \_\_\_\_ of \_\_\_\_:** This field is used link all documents associated with each marine operation. Pages should be numbered consecutively and arranged in the order that sightings or retrievals occur during each survey.

**Trip #:** Trip numbers will be three digit numbers designated by the number of trips the observer has completed as part of this program. For example observer C45's first trip will be 001, the second trip will be 002 and so forth.

**Survey #:** This is a three digit number assigned by the observer on a trip basis for each of the surveys completed during a trip. A survey is an observation event focused on a single marine effort such as surface skimming or surface burning.

**Date:** Enter the date that the survey is commenced.

**Vessel Name:** Indicate the name of the vessel from which observations are being completed.

**Type:** Indicate the type of vessel from which the observations are being completed.

**Location:** The fields contained in this section of the data form will capture the start and end position and time relative to the survey platform in which the observer is completing the visual observation and species retrieval. Additional elements such as general location, qualitative description of the oil and habitat type will also be recorded by checking the most appropriate box.

**Length of Boom:** Recorded in feet this figure should be obtained by asking the Captains of the vessels towing the boom or from the burn team.

**Skirt Height:** Recorded in inches this field should be obtained from the Captains of the vessels towing the boom or from the burn team.

**Start Burn Time:** Using the 24hour clock format record the time that the burn in initiated by the burn team.

**Weather Description:** Indicate one of the following weather conditions: unknown, clear, partly cloudy, continuous layer of clouds, drizzle, rain, showers, thunderstorms, rain and fog, fog or thick haze, or other with a description in the comments section.

**Visibility:** Estimate in feet the distance of clear visibility across the survey area.

**Sea State:** Using the Beaufort scale describe the sea state present during the survey.

**Animal Observation Summary:** This section is used to summarize the condition of each type of animal encountered during a survey.

**Sighting and Retrieval-Additional Information:** This section is used to log each specimen encountered during the survey.

**Spec. #:** Indicate the three digit specimen number assigned by the observer on a per survey basis for each animal sighted and/or retrieved during the survey.

**Species:** Indicate the common name of the species sighted and/or retrieved.

**Condition:** Note whether the animal was alive “A”, deceased “D”, or unknown “UK” upon sighting and separated by a hyphen whether the animal was retrieved “R” or stayed “S” at sea. For example if a live animal is encountered and it is retrieved the observer would indicate A-R in the condition field. If the animal is not retrieved and stays at sea the observer must use the comment section to describe the circumstances for leaving the animal at sea.

**Photos:** Indicate with a “Y” or “N” if digital images of the specimen were taken.

**Latitude and Longitude:** Using the format of DD.MM.mmm indicate the position of the vessel when the animal is retrieved. In the event that an animal is not retrieved indicate the position of the survey vessel, approximate the distance to the animal in feet and indicate the information in the comment section.

**Survey phase:** Indicate one of the following:

1. survey of material in front of trawlers
2. survey of material in boomed area
3. survey of material trawling behind boom

**Comments:** Indicate with a “Y” or a “N” whether comments have been included pertaining to the specimen.

**Comments:** This section should be used to document all observed interactions between animals and gear, list key identification characteristics, to describe behavioral characteristics and any other notable information pertaining to the survey. All information relative to a specimen should be identified by the specimen number.

**Specimen Delivery Information:** This section is used to document the chain of custody for all specimens that are either transferred at sea or delivered to a shore based facility.

**Date Specimen Delivered:** Indicate the data that the specimen was transferred or delivered (mm/dd/yy).

**Vessel/Organization Name:** Indicate the name of the vessel or organization that receives the specimen.

**Name of Receiving Individual:** Indicate the name of the individual that takes possession of the specimen.



## Sea Turtle At-Sea Retrieval Protocol

All live and dead sea turtles (includes oiled turtles) should be recorded and retrieved (if possible) and taken to an onshore facility for cleaning and rehabilitation or salvage/necropsy. Animals can be netted at the surface using dipnets or other hoists. Once onboard, sea turtles need to be carefully handled and transported to shore as soon as possible, in accordance with NMFS guidance.

### **BE SURE TO USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT**

(Gloves, Tyvek suits, boots, and goggles if necessary)

Sea Turtle Retrieval Kit (1 per boat) Includes:

- o Large Diameter dip net
- o Large Rubbermaid Crate
- o Large Cotton Towel
- o PPE (Gloves, Tyvek, goggles)



1. Bring turtle on board (dipnets are useful for small turtles less than ~3 ft length). Do not pick up turtles by their flippers, but rather, lift them by grasping both sides of the carapace. If the turtle attempts to evade capture, do not pursue. When handling turtles, be aware of the head and flippers – they will bite and have powerful flippers with claws.
2. Determine position at sea (latitude/longitude coordinates as DD.DDDD).
3. Contact the Wildlife Hotline (866-557-1401) or your supervisor to report the turtle to the Wildlife Branch as quickly as possible.
4. Get the towel wet and put it in the bottom of the transport crate. Place the turtle on top of the towel. Put the crate with the turtle inside in the shade. Do not add more water to the crate.
5. If the turtle appears to be dead, follow the same process but roll the towel up to raise the hind end a few inches higher than the head. Keep the crate in the shade. (Note: live turtles may appear comatose for up to 24 hours!)
6. Deliver the sea turtle (live or dead) to the designated Response Center. Transport turtles in individual containers when possible. Be sure to provide location, date and time data, and a chain of custody form with each turtle.

## Marine Animal Observation Form

Vessel:		Start Date:		Start Time (CDT):	
Start Location (Lat/Long): End Location (Lat/Long):		End Date:		End Time (CDT):	
Task Force:		Trip #:		Capt Name:	
Number of Vessels in Task Force:		Length (ft):		Depth:	
Mission:		Lat:		Long:	
# vessels within 1 nmi radius ____		Beaufort Sea State: ____			
Observer(s):					
e-mail:		Phone:		Mobile:	
Water Oiling Cond:	heavy oil __	med oil __	light oil __	sheen __	no vis oil __
Animal Behavior:	traveling __	direction __	milling __	avoid ship __	bowriding __
Status:	alive __	injured __	dead __	If injured or dead, ph: 985 493 7829	
Obs Cond:*	excellent __	good __	fair __	poor __	
Species:	sm dolphin __	# ____	Species ID, or description if possible (e.g., approx size, amount of oiling, etc.):		
	lg dolphin __	# ____	Species ID, if possible:		
	whale __	# ____	Species ID, if possible:		
	manatee __	# ____	Species ID, if possible:		
	turtle __	# ____	Species ID, if possible:		
Photos:					

Please return completed forms to:

Mark A. Fraker, [maf@terramarresearch.com](mailto:maf@terramarresearch.com), mobile: 250-661-0696 OR

Comments:

\* excellent = nothing to interfere with sighting; good = minor interference (e.g., glare / rough water); fair = some interference; poor = significant interference.

There is considerable interest in the response of whales, dolphins, sea turtles, and manatees to the MC252 oil spill. Observers on vessels operating in the vicinity of the spill would be making an important contribution if they would report observations on the above form. There are nearly 30 whale and dolphin species known from the Gulf of Mexico. Most are rare and difficult to identify.

The Sperm Whale is large and relatively easy to ID. Bryde's Whale is the only large baleen whale likely to be seen, but it is rare.

Photos can be very helpful for confirming ID.

Suggested ID guide: Wynne, Kate, and Malia Schwartz. 1999. Guide to marine mammals and turtles of the US Atlantic and the Gulf of Mexico.

Please return completed forms to:

Mark A. Fraker, [maf@terramarresearch.com](mailto:maf@terramarresearch.com), mobile: 250-661-0696 OR

## **BEST MANAGEMENT PRACTICES TO PROTECT SEA TURTLES AND MARINE MAMMALS**

### **Skimmer Operations:**

#### **Sea Turtles**

- Use of oil skimmers can adversely affect sea turtles through possible capture and/or entrainment.

#### **Best Management Practices To Reduce Skimmer Impacts to Sea Turtles**

- Collection of all live and dead turtles needs to be conducted according to the attached protocols (attachment 1).
- The best possible mitigative measure would be to have turtle rescue vessels (with trained rescue personnel, if available) accompany selected skimming task forces to search the material to be skimmed and collect all turtles found in the area, before skimming operation begin. If this is not possible then the following should be considered:
  - o Have a trained observer (if available) or a crew member dedicated to looking for sea turtles (and marine mammals) during skimming operations and record each sighting event, including GPS location, species (if known), description of encounter on the attached form (attachment 2).
  - o If possible and if the skimming platform allows (i.e. size of vessel) and there is no risk to human safety collect live and dead sea turtles according to attachment 1.
  - o Contact the Wildlife Hotline (866-557-1401) or your supervisor to report the turtle to the Wildlife Branch immediately.
  - o If possible all Sargassum that is not-oiled or is only very lightly oiled should be avoided.

#### **Marine Mammals:**

- Use of oil skimmers can adversely affect marine mammals through possible capture and/or entrainment.

#### **Best Management Practices To Reduce Skimmer Impacts to Marine Mammals**

- Have a trained observer, if available, or a crew member dedicated to looking for marine mammals that maybe affected by equipment or are impacted by oil.
- Contact the Wildlife Hotline (866-557-1401) or your supervisor to report any marine mammal that is impacted by skimming operations or that has signs of oil impacts to the Wildlife Branch as quickly as possible.
- If possible avoid skimming operations where marine mammals have been spotted, if a marine mammal is spotted during operations, if possible, stop operations until the animal is outside the operations area.

## **In-Situ Burning (Offshore):**

### **Sea Turtles**

- Sea turtles can be adversely affected during corralling of oil and oiled Sargassum or other converged material by being herded by the booms into oil, turtles may also be in the oil already whether or not there is Sargassum present. Any live turtles in the boomed oil and/or oiled Sargassum or other converged material will be burned alive when the oil is ignited

### **Best Management Practices to Reduce In-Situ Burns Impacts to Sea Turtles**

- Collection of all live and dead turtles needs to be conducted according to the attached protocols (attachment 1).
- The best possible mitigative measure would be to have turtle rescue vessels (with trained rescue personnel, if available) accompany the burn taskforce into the burn box and to search all material to rescue turtles prior to burning, while oil is being boomed or otherwise is awaiting burning. If this is not possible then the following should be considered:
  - o Send turtle rescue vessels (with trained rescue personnel, if available) into the next day's projected burn box to search for and rescue turtles. Feasibility will depend on the size of the projected area and whether material has already been boomed or otherwise collected.
  - o Have a trained observer (if available) or a crew member dedicated to looking for sea turtles (and marine mammals) during corralling operations and record each sighting event, including GPS location, species (if known), description of encounter on the attached form (attachment 2).
  - o Contact the Wildlife Hotline (866-557-1401) or your supervisor to report the turtle to the Wildlife Branch immediately.
  - o If possible all Sargassum that is not-oiled or is only very lightly oiled should be avoided.
  - o If possible a survey should be conducted in the burn area after the burn is complete and all dead sea turtles should be counted and if possible collected.

### **Marine Mammals:**

- Marine mammals can be adversely affected by in-situ burns if they are in the burn area during burning. It is expected that marine mammals will avoid the area once the oil is ignited.

### **Best Management Practices to Reduce In-Situ Burns Impacts to Marine Mammals**

- Have a trained observer, if available, or a crew member dedicated to looking for marine mammals that maybe affected by the burn or are impacted by oil.

- Contact the Wildlife Hotline (866-557-1401) or your supervisor to report any marine mammal that is impacted by burn operations or that has signs of oil impacts to the Wildlife Branch as quickly as possible.
- If possible avoid burn operations where marine mammals have been spotted, if a marine mammal is spotted during operations, if possible, stop operations until the animal is outside the operations area.

**From:** John Carlson <[john.carlson@noaa.gov](mailto:john.carlson@noaa.gov)>  
**Subject:** **Fwd: update on observer activities**  
**Date:** July 3, 2010 9:02:48 AM CDT  
**To:** Alexis Gutierrez <[Alexis.Gutierrez@noaa.gov](mailto:Alexis.Gutierrez@noaa.gov)>



Begin forwarded message:

**From:** John Carlson <[John.Carlson@noaa.gov](mailto:John.Carlson@noaa.gov)>  
**Date:** July 2, 2010 7:39:54 PM CDT  
**To:** Teri Rowles <[Teri.Rowles@noaa.gov](mailto:Teri.Rowles@noaa.gov)>  
**Subject:** update on observer activities

Teri

per your request

John

-----  
John K. Carlson, Ph.D.  
NOAA Fisheries Service  
Southeast Fisheries Science Center  
3500 Delwood Beach Rd.  
Panama City, FL 32408  
850-234-6541 ext 221  
[john.carlson@noaa.gov](mailto:john.carlson@noaa.gov)

-----  
**REPORT ON CURRENT OBSERVER ACTIVITIES**

In response to a restraining order to halt all in-situ oil burn operations because of sea turtle interactions and mortalities; effort has been underway to develop a short term observer program to immediately deploy observers on Burn Unit Task Forces.

Currently 4 individuals have been identified through an existing contract with East Coast Observers. These observers have already received HAZWOPPER training and at-sea safety training and will only require training in terms of an overview of the program and data collection requirements. Observer training will take place on Sunday July 4. It is anticipated that 2-3 Burn Task Force Units will begin operations as weather conditions improve on July 5, 2010. Subsequent to training, 1 observers will accompany each Burn Task Force as part of the normal crew.

Development of a long-term contract is currently underway. This contract will provide observer coverage for all skimmer activities including burn units. Potential contractors have been identified and preliminary discussion has taken place. One contractor is preparing an estimated budget.



From: John Carlson <John.Carlson@noaa.gov>  
Subject: **update on observer activities**  
Date: July 2, 2010 7:39:54 PM CDT  
To: Teri Rowles <Teri.Rowles@noaa.gov>



Teri

per your request

John

-----  
John K. Carlson, Ph.D.  
NOAA Fisheries Service  
Southeast Fisheries Science Center  
3500 Delwood Beach Rd.  
Panama City, FL 32408  
850-234-6541 ext 221  
john.carlson@noaa.gov

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Development of a long-term contract is currently underway. This contract will provide observer coverage for all skimmer activities including burn units. Potential contractors have been identified and preliminary discussion has taken place. One contractor is preparing an estimated budget.

From: John Carlson <John.Carlson@noaa.gov>  
Subject: **observer contract draft**  
Date: July 3, 2010 2:22:43 PM CDT  
To: Teri Rowles <Teri.Rowles@noaa.gov>, Alexis Gutierrez  
<Alexis.Gutierrez@noaa.gov>  
▶ 1 Attachment, 76.5 KB



comments?



BP observer ...doc (76.5 KB)

## STATEMENT OF WORK

**C.1. Project title**

Observer coverage of skimmer and burn vessel units associated with oil removal in the Deep Water Horizon oil spill

**C.2. Background and objective**

Sea turtles are particularly susceptible to population declines because of their vulnerability to anthropogenic impacts during all life-stages. Commercial and recreational activities can have an adverse effect on sea turtles. For example, various methods used in fisheries, including trawling, pot fisheries, longlines, and gillnets are known to cause fatal interactions with sea turtles. Dredge and fill operations and underwater explosions can cause fatal injuries. As such, many species are listed as threatened or endangered under the United States Endangered Species Act (ESA). Additional background information on the status of sea turtle species can be found in a number of published documents, including recovery plans for the Atlantic green sea turtle (*Chelonia mydas*, NMFS and USFWS 1991a), hawksbill sea turtle (*Eretmochelys imbricata*, NMFS and USFWS 1993), Kemp's ridley sea turtle (*Lepidochelys kempii*, USFWS and NMFS 1992), leatherback sea turtle (*Dermochelys coriacea*, NMFS and USFWS 1992), loggerhead sea turtle (*Caretta caretta*, NMFS and USFWS 1991b).

In efforts to reduce the level of surface oil from the Deep Water Horizon Oil Spill, the use of in situ burns of oil and gas on the surface of U.S. territorial seas in the Gulf of Mexico has resulted in the take of ESA listed sea turtles including Kemp's ridley, loggerhead but also may include green and leatherback sea turtles. This take is without authorization for the "take" of listed species as required by the ESA. 16 U.S.C. § 1638(a)(1)(A) (prohibiting any person from committing the "take" of listed species "within the United States or the territorial sea of the United States"); 16 U.S.C. § 1532(19) ("The term 'take' means to harass, harm, pursue, attempt to engage in any such conduct."). Moreover, although currently not documented the use of oil skimmers can adversely affect sea turtles through possible capture or entrapment. The magnitude of these marine events is not currently known. Data necessary to estimate the "take" of sea turtles during these activities is required to meet the mandates of the ESA.

**C.3. Scope**

This solicitation is for the procurement by British Petroleum of "Contractor" to furnish the necessary personnel, material, equipment, services and facilities (except as otherwise specified) to perform the following the Statement of Work/Specifications (see sections C.5 and C.6.). Extensions to this completion date (e.g., due to prolonged periods of inclement weather) may be requested by the Contractor but must be approved by British Petroleum.

**C.4. Period of performance**

It is anticipated that the Contractor will complete all work by December 31, 2010. However, given the potential for unforeseen delays (e.g., due to inclement weather), the period of performance shall range from time of award to October 31, 2010.

### **C.5. Description of work**

The National Marine Fisheries Service (NMFS) requires the recruitment, selection, supervision, and outfitting of observers to fulfill the obligations of Section 7 and 9 of the Endangered Species Act (see sections C.2). The Endangered Species Act requires NMFS to monitor and report on all levels of sea turtle interactions with commercial activities including but not limited to commercial fishing, dredging and dredge spoil dumping, and oil platform removal. NMFS categorizes all of these activities based on the human-caused level of serious injury or mortality of sea turtles.

The work required under this contract is to collect data needed to report levels of interactions with sea turtles and other protected species bycatch. Approximately 100% percent and 25% of the in situ burn and skimmer effort, respectively, shall be observed by month and area throughout the contracted period. The Contracting Officer's Technical Representative (COTR) will work with the Contractor in determining which vessels should be selected, how data will be collected, edited, and submitted, and answer questions or deal with concerns of the BP America, Inc. and the Unified Command for the Deepwater Horizon Oil Spill ("Unified Command"). Observers shall record scientific data on marine species, observe in situ burn and skimmer, and collect and return captured sea turtles according to protocols developed by NMFS.

#### **1. Objectives of the Program**

The primary goal of this Program is to report on the number, condition, and nature of incidental injury and mortality to sea turtles and other protected resources occurring during the course of in situ burn and skimmer operations in U.S. territorial seas in the Gulf of Mexico. Its main objectives are, in order of priority, to: 1) obtain reliable estimates of incidental serious injury and mortality of sea turtles; 2) where possible, remove and coordinate collection and transport of injured sea turtles as a result of contamination by oil or skimmer activities to appropriate rehabilitation facilities and 6) record data on other protected species bycatch and discard levels and aspects and procedures of the in situ burn and skimmer activities.

#### **2. SCOPE OF WORK**

The contractor shall furnish the necessary personnel, materials, services, facilities (unless otherwise specified in Task Orders), and otherwise do all tasks necessary to perform the work and services called for under this Scope of Work.

The contractor, as an independent contractor and not as an agent of the US Government or BP America, Inc. and the Unified Command for the Deepwater Horizon Oil Spill shall furnish as may be required and ordered by BP America, Inc., SERVICES which include environmental, biological, and operations data collection. These activities shall be performed in accordance with the Statement of Work and selected Task Orders and shall be accomplished by contractor personnel in each of the following categories, having qualifications as represented by the contractor in its proposal listed as follows:

#### Living Resource Sampling and Environmental Data Collection

- Acquire and provide information on in situ burn and skimmer operations and logistics for refinement of sampling design
- Conduct field sampling and data collection on in situ burn and skimmer operations, environmental conditions
- Report on the number, condition, and nature of incidental injury and mortality to sea turtles and other protected resources
- Data quality control

#### Program Support Services

- Assist in the preparation of program specifications and designs
- Provide logistics and operational support for observer deployment
- Equipment operation and maintenance

### 3. Program Coordination

The contractor shall provide overall administrative and contractual support including insurance and liability coverage, and employ the mobile workforce of contracted observers, and other contracted personnel who will collect data and assist in activities required. The contractor shall be responsible for adherence to all federal, state, local, and site-specific safety regulations.

Sampling and data collection will be performed on a flexible work schedule depending on in situ burn and skimmer operations. Consequently, precise work hours or work dates cannot be determined in advance. Work schedules may involve shift or weekend periods.

Sampling will be conducted under a variety of weather and working conditions.

This contract requires 100 percent and 25% observer coverage of the in situ burn and skimmer effort, respectively, in each region. However, this level may be modified by the COTR accordingly prior to or during operations subject to program coverage needs and the vagaries of in situ burn and skimmer operations. Initial focus of observer coverage should be on those vessel or operations with the highest risk to sea turtles. In addition, the distribution of observers and port assignments may change during the course of this contract as the progresses. It is understood that factors such as weather, changes to in situ burn and skimmer operations, and other unforeseen circumstances may interfere with observer effort and is taken into consideration in program design and data analysis. The Contractor shall determine the number of observers needed per region to meet the initial target coverage rate. The Contractor shall maintain an accurate real time assessment of effort through coordination with the Unified Command for the Deepwater Horizon Oil Spill. Observers shall be resident in the area, either on land or on a staging vessel and travel to meet vessels to meet the coverage needs.

In general, during the in situ burn operations observers shall be stationed on the ignition boat and conduct the survey from a position that optimizes visibility. Data forms will be

filled out by the observer that include information on the time survey begins, location, sea state, a general description of the oil and habitat, and unique information to track the survey data.

A sea turtle survey includes monitoring of 3 areas prior to the burn including; the area in front of the trawlers, oil concentrated in the boom, and any oil trailing behind the boom. As part of the survey, observers will note the type of oil encountered during the survey, the type of habitat (e.g. sea weed or other aquatic vegetation) encountered during the survey.

All attempts will be made to recover sea turtles. Sea turtles that cannot be captured due to safety or other reasons will be recorded. Sea turtles encountered during the survey that can be removed from the oil will be captured with a dip net. The sea turtle will be boarded and the observer will provide a cursory assessment of its status. Data relative to condition, location, and survey phase will be recorded. Sea turtles will be placed in a confined area and covered with a wet towel to minimize stress if the animal is alive. The sea turtle will be transported to the support vessel and the observer will notify the support vessel to transport the sea turtle back to land. The Contractor in collaboration with the COTR may need to make further modifications to the data form and sampling procedures as more information is gathered.

As of July 3, 2010, only an initial assessment of the risk to sea turtles and other protected species has been provided. The Contractor will need to make further observations and modify coverage and directives as more information is gathered. All skimmers have the potential to interact with live sea turtles through impingement and entrainment, and also interact with injured or dead wildlife. The following table ranks the relative risk of skimmers in determining observer coverage to monitor operations and recover sea turtles. Ideally, some data would be collected on all medium and high risk skimming operations. This assessment is based on the available information.

HIGH	MEDIUM	LOW
Big Gulps (offshore near shore)	TMT A Whale	Dutch arm <sup>f</sup>
Mini-Gulps (passes)	Boom trawlers with floating weirs in heavy oil (offshore) <sup>c</sup>	Drum weirs
Ocean busters	Boom trawlers with sorbents <sup>e</sup>	Disc weirs
Current busters	Belt/mechanical skimmers	Rope mops
Harbor busters		Floating weirs in light-medium oil
USCG floating weir <sup>b</sup>		
Fishing type trawl net boom <sup>d</sup>		

<sup>a</sup> The configuration of all busters is the same, the only difference is size (ocean>current>harbor).

<sup>b</sup> Enclosed net configuration with similar concerns to the busters.

<sup>c</sup> The greatest risk is to juvenile (smaller) sea turtles. The greatest potential risk to turtles from skimmers is becoming entrapped in the boom and funneled toward the weir.

<sup>d</sup> May not be in use.

<sup>e</sup> The ratio of boom (above) to skirt (below) is about 1/3 above water to 2/3 below water. The skirt length ranges between 12 in to about 3 ft. Longer skirts pose greater risks than smaller skirts and could entrap floating or debilitated sea turtles.

<sup>f</sup> Are reported to have debris exclusion devices installed that would also protect sea turtles. Needs to be verified once the arms arrive on scene.

#### 4. PLACES OF DELIVERY/PERFORMANCE

The contractor shall perform tasks under the contract in Gulf of Mexico ports and aboard vessels or at set net sites, dependent on the in situ burn and skimmer operations or as appropriate, at the contractor's facilities.

The following is a representative listing of probable observer operation locations:

- 1) Houma, Louisiana
- 2) Mobile, Alabama
- 3) Venice, Louisiana
- 4) Port Fourchon, Louisiana

#### 5. DESCRIPTION OF DIRECT LABOR CATEGORIES

The following direct labor categories are required to perform the anticipated contract. All categories are described in a generic manner; however, each category is required to have background, experience, and education.

**Observer Coordinator**--Task Coordinator shall have experience in the scientific environment with a basis on observer management and deployment, which will be required in each specific Task Order. Specific duties are organizing and controlling the contracted service, managing and directing subordinates and subcontracted observers, reporting to the contract technical management and controlling the tasks' administrative, personnel, and operations activities.

**Experience required**-- At least 3 years experience in managing such tasks is required.

**Education required**--A Bachelor's degree or higher related to the requirements of the specific Task Order is required.

**Fishery Observers**--Collects data as required in the performance of the contract. Definitions and levels are defined by the Department of Labor. See Section C.2.6.a. below for required observer experience and education.

## FISHERY OBSERVER

Independently executes duties, resolving exceptions and special problems or to make adaptations in the procedures. Collects observational, environmental, and biological data according to detailed procedures. According to established standards and detailed procedures, records data on appropriate paper or electronic forms and logs. Maintains field equipment and supplies. May enter and transfer data electronically.

## 6. OBSERVER QUALIFICATIONS, RESPONSIBILITIES AND DUTIES

At a minimum, 75% of the observer workforce shall have a Bachelor's degree in the natural sciences. Individuals that do not meet degree requirement shall be evaluated based upon observing experience, academic standing, personality attributes, physical fitness, and overall experience. All observers must meet the following standards:

- a. Academic background and experience. Candidates must have a Bachelor's or higher degree in the biological sciences from an accredited college or university with a minimum of 30 semester hours in applicable biological sciences and at least one undergraduate course in math, statistics, or computer science OR 3 years experience as skipper or first mate.
- b. Personality attributes. The mental and emotional demands on observers are rigorous. Candidates shall be mature and capable of working independently without direct supervision under stressful conditions. They shall be self-motivated, possess good judgment, and be able to work and live in close quarters with other individuals in a professional and respectful manner.
- c. Good physical condition. All observers must have passed a complete physical examination within the 6 months prior to deployment.
- d. CPR. Observers must be CPR-trained and have a current certification prior to the training. It should be the observer's responsibility to ensure proper re-certification or renewal to maintain certification. A copy of the CPR card shall be provided to the Contractor by the observer.
- f. Background Checks. Criminal background checks will be performed for each observer. The COFR will review the results on a case-by-case basis and retains the right to deny accepting a candidate based on the information provided.
- g. Observer Training. All observers must successfully complete the training course.
- h. Standards of Conduct for Observers. The observer must avoid any behavior that could adversely affect the confidence of the public in the integrity of the Observer Program. Observers shall conduct themselves in a manner that will reflect favorably upon the Observer Program by maintaining high standards of honesty, integrity, impartiality, and conduct in all situations. Observers:



- (1) Must diligently perform their assigned duties;
- (2) Must accurately record their sampling data, write complete reports, and report honestly;
- (3) Must protect the confidentiality of all collected data and observations made on board vessels. Observers shall not use any data collected under this contract for purposes other than the performance of this contract nor shall observers retain, release, reproduce, distribute, or publish any of the data without prior approval;
- (4) Must refrain from engaging in any illegal actions or any other activities that would reflect negatively on their own or others' image(s) as professional observers or on the Observer Program as a whole. This would include, but is not limited to:
  - (a) Engaging in excessive drinking of alcoholic beverages;
  - (b) Engaging in the use or distribution of illegal drugs;
  - (d) Engaging in criminal, dishonest, disrespectful, or disgraceful conduct that may be perceived as prejudicial to the Government.

Behavior that is contrary to these standards or to the intent of these standards would be considered grounds for disqualifying the offending observer or termination of any observer subcontract. Falsification of observer data is grounds for dismissal.

**From:** John Carlson <John.Carlson@noaa.gov>  
**Subject:** Re: Observer tracking sheet  
**Date:** July 4, 2010 8:36:47 AM CDT  
**To:** Luke Szymanski <Luke@aisobservers.com>



► 1 Attachment, 22.0 KB

The file I had was corrupted as well. I asked Mark for another copy because I have a hard copy only. I haven't gotten a new copy from Mark. However, I developed an observer protocol based on what Mark sent us. its attached



Observer pr....doc (22.0 KB)

On Jul 4, 2010, at 8:11 AM, Luke Szymanski wrote:

Hello John,

Could you please send me the document titled Observer Protocol-Surface Burn Task Force. This is the protocol that Mark Dodd drafted. The file that I have is corrupted and it will not open properly.

Thank you,

Luke

Luke Szymanski  
Marine Projects Manager  
A.I.S., Inc  
89 North Water Street  
New Bedford, MA 02740  
774-265-0596  
[www.aisobservers.com](http://www.aisobservers.com)

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**From:** John Carlson [<mailto:John.Carlson@noaa.gov>]  
**Sent:** Sun 7/4/2010 8:52  
**To:** Luke Szymanski  
**Cc:** [Alexis.Gutierrez@noaa.gov](mailto:Alexis.Gutierrez@noaa.gov)  
**Subject:** Re: Observer tracking sheet

excellent job Luke. you da man

thanks

John

On Jul 4, 2010, at 12:03 AM, Luke Szymanski wrote:

Hello,

I have attached a tracking sheet that will help me to keep track of the observers. I will add additional deployment types once we start covering the different of skimming operations. I apologize for not communicating my plan to be in Houma Monday morning. Regardless whether we head to sea tomorrow or complete the classroom training I plan to head back to LA tomorrow. This will allow me to collect the cameras, GPS units, clipboards and additional supplies Monday AM. On Monday I will meet the Observers in Venice around 1400 to distribute the gear and to discuss any outstanding issues. Since the Observers will be using the trailers in Venice for the time being, should I make sure that they are cleaned after our people use them and restock them with the essential items? Something to think about is that we will be receiving a fairly large quantity of gear next week. Ideally I would be able to make up Observer kits and store them somewhere. The same storage area could also be used by Observers between deployments as I assume that they will be heading home for a period of time. Jim at the warehouse gave me the impression that he did not have any extra room at that facility.

Luke Szymanski  
Marine Projects Manager  
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New Bedford, MA 02740  
774-265-0596  
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<Observer Tracking Sheet 2010.xls>

## OBSERVER PROTOCOL

A Burn Unit includes a pair of trawlers pulling a boom, an ignition boat, and a support vessel (crew boat). As part of the general oil collection operations paired trawlers pull a 500' boom at approximately 0.5 knots to concentrate oil for burning. Once ignition boat personnel determine the oil is ready for ignition, a sea turtle survey will be initiated.

The observer will be stationed on the ignition boat and conduct the survey from a position that optimizes visibility. A general header data collection sheet (attachment 1) will be filled out by the observer that includes information on the time survey begins, location, sea state, a general description of the oil and habitat, and unique information to track the survey data.

A sea turtle survey includes monitoring of 3 areas prior to the burn including; the area in front of the trawlers, oil concentrated in the boom, and any oil trailing behind the boom. As part of the survey, observers will note the type of oil encountered during the survey, the type of habitat (e.g. sea weed or other aquatic vegetation) encountered during the survey.

Sea turtles encountered during the survey that can be removed from the oil will be captured with a dip net. The sea turtle will be boarded and the observer will provide a cursory assessment of its status. Data relative to condition, location, and survey phase will be recorded. Sea turtles will be placed in a confined area and covered with a wet towel to minimize stress if the animal is alive. The sea turtle will be transported to the support vessel and the observer will notify the support vessel to transport the sea turtle back to land.

**From:** John Carlson <John.Carlson@noaa.gov>  
**Subject:** **Fwd: update on the briefings and meetings with the plaintiff**  
**Date:** July 4, 2010 8:45:05 AM CDT  
**To:** Guy Davenport <guy.davenport@noaa.gov>, Bonnie Ponwith <Bonnie.Ponwith@noaa.gov>, "Theo R. Brainerd" <theo.brainerd@noaa.gov>



Greetings from Houma

just wanted to give you an update of whats going on here for me so you are in the loop. I've been ramping things up getting the observer program up running. the stakes went up exponentially due to the litigation to cease all in situ burn activities of oil as a result of the potential for sea turtle interactions.

I took part in a call yesterday with the plaintiffs and CG, NOAA-GC, and PR. Below are notes from the call that will go to F suite and emails related for your information.

My tour here ends Tuesday and then I'm finally off on leave

John

Begin forwarded message:

**From:** Teri Rowles <Teri.Rowles@noaa.gov>  
**Date:** July 3, 2010 7:36:55 PM CDT  
**To:** Helen Golde <Helen.Golde@noaa.gov>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>, David Cottingham <David.Cottingham@noaa.gov>, David Bernhart <David.Bernhart@noaa.gov>, Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, John Carlson <John.Carlson@noaa.gov>, Teri Rowles <Teri.Rowles@noaa.gov>  
**Subject:** **update on the briefings and meetings with the plaintiff**

Here is my take on the calls. A, J and D please weigh in THANK YOU

3 pm CDT briefing with DOJ, FWS, NOAA, BP, USCG attorneys and staff: spent a lot of time explaining operations (burn task force lead for BP), turtle biology, and the observer program. John did a fantastic job describing what we are doing now and planning to do and David B along with Pam Lawrence explained ESA issues. The BMPs are not yet final and in the operational plans for each day.

The two Burn Task Forces will have four operational pairs of shrimp vessels (8 boats) and three ignitor boats and will leave on Sunday but are not expected to have burns until Tuesday. The discussion of what to do if a live turtle is in the center of the oil did not resolve into a final decision and there will likely be more discussion of that situation. The call was interrupted at the end when the plaintiffs came on early.

4 pm CDT all of the above plus the Plaintiff lawyer plus four Turtle Island Restoration Network staff

and a former US FWS sea turtle biologist.

BP burn task force lead explained the operation and John Carlson gave an overview of the observer program.

The plaintiffs concerns were concerned about:

1. altitude that the spotter plane flies is too high to see turtles
2. Need more information and information flow from what is happening regarding protection of turtles and numbers of turtles affected
3. Who are the observers and how are they trained. Followed by noting that they want to volunteer to assist.
4. Would it be possible to identify areas of high turtle concentration and have the burn task force avoid those areas.
5. Would it be possible to identify concentrations of sargassum and check those areas out before the booming or burning.
6. Identification of alternative methods of removing oil from surface in areas of high turtle density instead of burning.
7. Want information on current turtle numbers (on water, stranded and soon to be observer) by species given to public.
8. Concerned that observers will be restricted from sharing information.

I expect that getting our website up and going (with appropriate staff) will be very beneficial to all of us. Doing more reporting with existing staff is going to be overwhelming.

On Jul 3, 2010, at 7:19 PM, Teri Rowles wrote:

Ditto on the issues that Alexis raised. We have in our staffing plan an outreach person and a dedicated public affairs type person due to the high profile of the species, the public concern, and the value of getting more information out to the public. We all agree that getting more information out is critical but we are overtaxed and can't. THANK YOU

William.Whitmore@noaa.gov wrote:

Thanks to everyone for calling in today. The USCG attorney here at the UAC was very thankful that David called in, and both attorneys here were impressed with John's explanation. So thanks for making NOAA look good.

One comment/question that I have, and I admit that right now I'm not the most familiar PR efforts by the SERO, but does anyone think we could be doing more to educate the public with what is going on? I know we have a pdf or two out there, but is there anything we could set up with a more accurate update of the situation with regards to turtles and ISB? I'm not sure how much, what, or how the process would have to go through the unified command for approval, but something to chew on. It seemed like some of these folks just wanted more information, and I was just wondering if you had any ideas on how we could get it to them.

\*Within NMFS PR, we have been trying to get permission to post more information on our website about what we are doing. We don't feel that the Deepwater Horizon NOAA website does an adequate job of representing our work or our issues. We have been given permission to develop a beta site but with staff pulled in many directions it has not gotten off the ground yet. Like anything more time and the right people, could address this. Teri, do you want to add more?\*

Also, if anyone had any concerns, or was uncomfortable with anything, please let me know so I can talk with the attorney here.

\*Not sure how the attorneys will develop the written response to the plaintiff, but the following items need to be discussed a bit more.

a.) Reporting species and size information on real-time basis is not possible. We scramble every night to put together the nightly report for the Unified Command and NOAA just on the numbers. If we had a lag time of a week or more than it might be possible to do a second report of the size and species. However, folks are feeling very report fatigued given that we do three a day already. Thus, more staff would have to be made available to do this.

b.) Rescuing adult sea turtles is not practical. There was a reference by Chris Pinetich (sp?) that we should be rescuing adult loggerheads and leatherbacks that are seen in oil. These animals are extremely large (Loggerheads 300+ lbs and Leatherbacks 400-1000lbs). We do not have the manpower nor the rehabilitation facilities to rescue these animals. Moreover, once we start doing this we are going to have to start rescuing every dolphin, whale shark, etc that is seen in oil. This is just not practical.

c.) Volunteering -- Turtle Island Restoration Network continues to want to volunteer as either observers or on our search and rescue teams. When we told them that they could not they went to Senator Feinstein and the White House. We need Unified Commands support to make it clear that it is inappropriate for a litigant to try to be volunteer moreover the safety issues involved with these operations make it that only trained and vetted individuals will be contracted. We have had a letter at Area Command since early this week and have heard nothing. If USCG does not want to sign this letter or wants to take a different tact, we would be very interested to know.

Thanks again! Have a great 4th! A

\*

Thanks again, and enjoy your holiday (for those of us that aren't working!)

-Willie

William.Whitmore@noaa.gov wrote:

Bob,

The USCG lawyer here had several conversations with some folks, reviewed some documentation, and saw your name as a Section 7 contact. Would you be interested in calling in today to discuss

the

lawsuit regarding in-situ burning and turtles? I know that David Bernhart and John Carlson are already calling in, but just wanted

to

touch base with you to see if you were interested? I apologize if you spoke with David and John and already participated in planning this. Just checking for USCG. Alexis and others in Houma, if you haven't heard from Bob, believe

he

|| would want to be involved, and have a cell phone number where I  
could  
contact him, please forward back.

Thanks,  
Willie  
508-566-3804



From: John Carlson <John.Carlson@noaa.gov>  
Subject: **Fwd: Document Request**  
Date: July 4, 2010 11:49:15 AM CDT  
To: Karla Reece <Karla.Reece@noaa.gov>



► 5 Attachments, 621 KB

FYI

Begin forwarded message:

**From:** Alexis Gutierrez <[Alexis.Gutierrez@noaa.gov](mailto:Alexis.Gutierrez@noaa.gov)>  
**Date:** July 4, 2010 10:24:18 AM CDT  
**To:** "Gelakoska, Marianne LCDR" <[Marianne.M.Gelakoska@uscg.mil](mailto:Marianne.M.Gelakoska@uscg.mil)>, [firemandrew876@gmail.com](mailto:firemandrew876@gmail.com), William Whitmore <[William.Whitmore@noaa.gov](mailto:William.Whitmore@noaa.gov)>, Ed Levine <[Ed.Levine@noaa.gov](mailto:Ed.Levine@noaa.gov)>, John Carlson <[John.Carlson@noaa.gov](mailto:John.Carlson@noaa.gov)>, [brian.w.seekins@uscg.mil](mailto:brian.w.seekins@uscg.mil)  
**Subject:** Document Request

Hi Marianne and Company,

Sorry we didn't get these to you earlier. We had another fire drill pop up (which Ed and Will we need to talk to you about that too). Included in this email you will find --

- 1.) Observer Equipment List
- 2.) In-situ Burn Team Training Ppt (in 2nd email)
- 3.) Observer protocol
- 4.) Marine Observer Form
- 5.) Marine Documentation Form
- 6.) BMPs for Sea Turtles
- 7.) Observer Company -- East Coast Observers, Owner is Trish Bargo. Trish can be reached at [tbargo@eastcoastobservers.com](mailto:tbargo@eastcoastobservers.com).

PLEASE NOTE -- That the BMPs is the last version we saw before we understand it went to Area to be incorporated with all the BMPs. Will can you confirm this is the final document? Can you let us know when Area will be distributing all the final BMPs via ERMA?

Thank you!! A



[equipment list.doc \(71.5 KB\)](#)



[Marine Speci....doc \(262 KB\)](#)



Marine Speci...doc (32.0 KB)



Observer pr....doc (46.0 KB)



TurtlesBMP.pdf (209 KB)

<b>DESCRIPTION</b>	<b>Number per Observer</b>
TYPE III MANUAL INFLATE PFD Stearns or Mustang	1
MARINE WHISTLE	1
EAR PLUGS (pair)	4
TYVEK SUIT - Size Extra Large	5
NOMEX SUIT	1
HARD HAT	1
SAFETY GLASSES	1
RESPIRATORY PROTECTION - must take a P100 organic charcoal cartridge (MSA)	1
4 GALLON WATERPROOF FLOAT BAG TO CONTAIN KIT - Ultra sill dry Sack - <a href="http://www.seatosummit.com.au">www.seatosummit.com.au</a>	1
LARGE BODY BAG 6mm thick 55 gallon, lab safety supply	25
Nitrile oil resistant gloves, xize (S) (1 box 100ct)	10
Nitrile oil resistant gloves, xize (M) (1 box 100ct)	10
Nitrile oil resistant gloves, xize (L) (1 box 100ct)	10
DIVE SLATE APPROXIMATELY 4" BY 6"	1
12 INCH CABLE TIES	50
DUCT TAPE	1
DIP NET WITH 12 FOOT TELESCOPIC POLE	1
ATLAS BRAND RUBBER GLOVES PAIR	20
SHARPIES PENS	5
MECHANICAL PENCILS	20
PLASTIC CLIPBOARD WITH STORAGE	1
OLYMPUS TOUGH WATERPROOF/SHOCK PROOF DIGITAL CAMERA	1
COMPACT FLASH CARDS FOR DIGITAL CAMERA, 4GB	5
BACK-UP RECHARGEABLE BATTERY FOR DIGITAL olympus CAMERA	1
olympus DIGITAL CAMERA CASE	1
HIGH SEAS OBSERVER TAGS	25
WATERPROOF BINOCULARS (7 X 50)	1
GUIDE TO MARINE MAMMALS & TURTLES OF THE U.S. ATLANTIC & GULF OF MEXICO, WRITTEN BY KATE WYNNE & MALIA SCHWARTZ	1
WATERPROOF FIELD LOG, hip pocket notebook 4w X 6l part # 646 - J L Darling Corp,	2
SATELLITE PHONE	1
GARMIN 72 H WATERPROOF HANDHELD GPS	1
BACK-UP RECHARGEABLE BATTERY FOR GPS	1

The information contained herein is confidential and should be submitted to NOAA Resources at Risk Environmental Unit: [nnfe.ser.emergency.consult@noaa.gov](mailto:nnfe.ser.emergency.consult@noaa.gov).

<b>MARINE SPECIES OBSERVATION FORM</b>		ANIMALS SIGHTED: Y OR N	
		ANIMALS RETRIEVED: Y OR N	
OBSERVER #:		PAGE ____ OF ____	
TRIP #:		DATE (MM/DD/YY):	
SURVEY #:		SKIMMER TYPE:	
OBSERVATION PLATFORM:			
<b>LOCATION</b>			
	START LAT/LONG (DD.MM.mmm)		START TIME(24hr)
	END LAT/LONG (DD.MM.mmm)		END TIME(24hr)
SOURCE <input type="checkbox"/> NON-SOURCE <input type="checkbox"/> NEAR SHORE <input type="checkbox"/> BEACH <input type="checkbox"/>			
<b>TARGET OIL</b>		<b>HABITAT TYPES</b>	
HEAVY (dark black/brown) <input type="checkbox"/>		SARGASSUM WEEDLINE: OIL <input type="checkbox"/> NO OIL <input type="checkbox"/>	OIL LINE NO SARGASSUM <input type="checkbox"/>
MEDIUM (brown to peanut color) <input type="checkbox"/>		DISPERSED SARGASSUM: OIL <input type="checkbox"/> NO OIL <input type="checkbox"/>	OTHER:
LIGHT (silver/rainbow sheen, metallic brn) <input type="checkbox"/>		HEAVY CONTINUOUS OIL NO SARGASSUM <input type="checkbox"/>	
Emulsified (orange) <input type="checkbox"/>		DISPERSED PATCHES OF OIL NO SARGASSUM <input type="checkbox"/>	
LENGTH OF BOOM (FT):		SKIRT HIEGHT (INCHES):	
START BURN TIME (24hr):	WEATHER DESCRIPTION	VISIBILITY (FT):	
		SEA STATE:	

## ANIMAL OBSERVATION SUMMARY

ANIMAL TYPE	NUMBER OF ANIMALS	
	ALIVE	DECEASED
Sea turtles		
Dolphins		
Whales		
Manatees		
Sea birds		
Other (Specify):		

The information contained herein is confidential and should be submitted to NOAA Resources at Risk Environmental Unit: [nmfe.ser.emergency.consult@noaa.gov](mailto:nmfe.ser.emergency.consult@noaa.gov).

SIGHTING AND RETRIEVALS- ADDITIONAL INFORMATION							
SPEC. #	SPECIES	CONDITION	PHOTOS (Y OR N)	LATITUDE	LONGITUDE	SURVEY PHASE	Comment (Y or N)

**COMMENTS** (Describe any interactions with equipment, species identification characteristics, behavioral characteristics, ect.):

SPECIMEN DELIVERY INFORMATION		
Date Speciment Delivered	Vessel/Organization Name	Name of Individual Receiving

The information contained herein is confidential and should be submitted to NOAA Resources at Risk  
Environmental Unit: [nmfe.ser.emergency.consult@noaa.gov](mailto:nmfe.ser.emergency.consult@noaa.gov).

<b>MARINE SPECIES OBSERVATION FORM</b>		ANIMALS SIGHTED: Y OR N	
		ANIMALS RETRIEVED: Y OR N	
OBSERVER #:		PAGE ____ OF ____	
TRIP #:		DATE (MM/DD/YY):	
SURVEY #:		SKIMMER TYPE:	
OBSERVATION PLATFORM:			
<b>LOCATION</b>			
	START LAT/LONG (DD.MM.mmm)		START TIME(24hr)
	END LAT/LONG (DD.MM.mmm)		END TIME(24hr)
SOURCE <input type="checkbox"/> NON-SOURCE <input type="checkbox"/> NEAR SHORE <input type="checkbox"/> BEACH <input type="checkbox"/>			
<b>TARGET OIL</b>		<b>HABITAT TYPES</b>	
HEAVY (dark black/brown) <input type="checkbox"/>		SARGASSUM WEEDLINE: OIL <input type="checkbox"/> NO OIL <input type="checkbox"/>	OIL LINE NO SARGASSUM <input type="checkbox"/>
MEDIUM (brown to peanut color) <input type="checkbox"/>		DISPERSED SARGASSUM: OIL <input type="checkbox"/> NO OIL <input type="checkbox"/>	OTHER:
LIGHT (silver/rainbow sheen, metallic brn) <input type="checkbox"/>		HEAVY CONTINUOUS OIL NO SARGASSUM <input type="checkbox"/>	
Emulsified (orange) <input type="checkbox"/>		DISPERSED PATCHES OF OIL NO SARGASSUM <input type="checkbox"/>	
LENGTH OF BOOM (FT):		SKIRT HIEGHT (INCHES):	
START BURN TIME (24hr):	WEATHER DESCRIPTION	VISIBILITY (FT):	
		SEA STATE:	

## ANIMAL OBSERVATION SUMMARY

ANIMAL TYPE	NUMBER OF ANIMALS	
	ALIVE	DECEASED
Sea turtles		
Dolphins		
Whales		
Manatees		
Sea birds		
Other (Specify):		

The information contained herein is confidential and should be submitted to NOAA Resources at Risk Environmental Unit: [nmfe.ser.emergency.consult@noaa.gov](mailto:nmfe.ser.emergency.consult@noaa.gov).

## SIGHTING AND RETRIEVALS- ADDITIONAL INFORMATION

SPEC. #	SPECIES	CONDITION	PHOTOS (Y OR N)	LATITUDE	LONGITUDE	SURVEY PHASE	Comment (Y or N)

**COMMENTS** (Describe any interactions with equipment, species identification characteristics, behavioral characteristics, ect.):

## SPECIMEN DELIVERY INFORMATION

Date Speciment Delivered	Vessel/Organization Name	Name of Individual Receiving
--------------------------	--------------------------	------------------------------

The Marine Species Observation Form has been developed to document information pertaining to the sightings and retrieval of marine species during at-sea operations. The data forms are to be completed by the observer during each dedicated survey. The form will be used for all marine operations involving visual observers. In the event that a field is not applicable indicate this by writing "N/A". In the event that information is unobtainable or unknown write "UK" in the corresponding field and describe the circumstances in the comment section of the data form.

**Animals Sighted:** Circle yes or no to indicate if any animals were sighted during surveys associated with marine operations.

**Animals Retrieved:** Circle yes or no to indicate if any animals were retrieved during the course of the marine operation.

**Observer #:** This is a unique number assigned to each observer by the contractor. e.g. C45

**Page \_\_\_\_ of \_\_\_\_:** This field is used link all documents associated with each marine operation. Pages should be numbered consecutively and arranged in the order that sightings or retrievals occur during each survey.

**Trip #:** Trip numbers will be three digit numbers designated by the number of trips the observer has completed as part of this program. For example observer C45's first trip will be 001, the second trip will be 002 and so forth.

**Survey #:** This is a three digit number assigned by the observer on a trip basis for each of the surveys completed during a trip. A survey is an observation event focused on a single marine effort such as surface skimming or surface burning.

**Date:** Enter the date that the survey is commenced.

**Vessel Name:** Indicate the name of the vessel from which observations are being completed.

**Type:** Indicate the type of vessel from which the observations are being completed.

**Location:** The fields contained in this section of the data form will capture the start and end position and time relative to the survey platform in which the observer is completing the visual observation and species retrieval. Additional elements such as general location, qualitative description of the oil and habitat type will also be recorded by checking the most appropriate box.

**Length of Boom:** Recorded in feet this figure should be obtained by asking the Captains of the vessels towing the boom or from the burn team.



**Skirt Height:** Recorded in inches this field should be obtained from the Captains of the vessels towing the boom or from the burn team.

**Start Burn Time:** Using the 24hour clock format record the time that the burn in initiated by the burn team.

**Weather Description:** Indicate one of the following weather conditions: unknown, clear, partly cloudy, continuous layer of clouds, drizzle, rain, showers, thunderstorms, rain and fog, fog or thick haze, or other with a description in the comments section.

**Visibility:** Estimate in feet the distance of clear visibility across the survey area.

**Sea State:** Using the Beaufort scale describe the sea state present during the survey.

**Animal Observation Summary:** This section is used to summarize the condition of each type of animal encountered during a survey.

**Sighting and Retrieval-Additional Information:** This section is used to log each specimen encountered during the survey.

**Spec. #:** Indicate the three digit specimen number assigned by the observer on a per survey basis for each animal sighted and/or retrieved during the survey.

**Species:** Indicate the common name of the species sighted and/or retrieved.

**Condition:** Note whether the animal was alive "A", deceased "D", or unknown "UK" upon sighting and separated by a hyphen whether the animal was retrieved "R" or stayed "S" at sea. For example if a live animal is encountered and it is retrieved the observer would indicate A-R in the condition field. If the animal is not retrieved and stays at sea the observer must use the comment section to describe the circumstances for leaving the animal at sea.

**Photos:** Indicate with a "Y" or "N" if digital images of the specimen were taken.

**Latitude and Longitude:** Using the format of DD.MM.mmm indicate the position of the vessel when the animal is retrieved. In the event that an animal is not retrieved indicate the position of the survey vessel, approximate the distance to the animal in feet and indicate the information in the comment section.

**Survey phase:** Indicate one of the following:

1. survey of material in front of trawlers
2. survey of material in boomed area
3. survey of material trawling behind boom

**Comments:** Indicate with a "Y" or a "N" whether comments have been included pertaining to the specimen.

**Comments:** This section should be used to document all observed interactions between animals and gear, list key identification characteristics, to describe behavioral characteristics and any other notable information pertaining to the survey. All information relative to a specimen should be identified by the specimen number.

**Specimen Delivery Information:** This section is used to document the chain of custody for all specimens that are either transferred at sea or delivered to a shore based facility.

**Date Specimen Delivered:** Indicate the data that the specimen was transferred or delivered (mm/dd/yy).

**Vessel/Organization Name:** Indicate the name of the vessel or organization that receives the specimen.

**Name of Receiving Individual:** Indicate the name of the individual that takes possession of the specimen.

## OBSERVER PROTOCOL

(subject to refinement and change as more data is gathered)

The observer will be stationed on the ignition boat and conduct the survey from a position that optimizes visibility. A general header data collection sheet will be filled out by the observer that includes information on the time survey begins, location, sea state, a general description of the oil and habitat, and unique information to track the survey data.

A sea turtle survey includes monitoring of 3 areas prior to the burn including; the area in front of the trawlers, oil concentrated in the boom, and any oil trailing behind the boom. As part of the survey, observers will note the type of oil encountered during the survey, the type of habitat (e.g. sea weed or other aquatic vegetation) encountered during the survey (see powerpoint for further elaboration)

Sea turtles encountered during the survey that can be removed from the oil will be captured with a dip net. The sea turtle will be boarded and the observer will provide a cursory assessment of its status. Data relative to condition, location, and survey phase will be recorded. Sea turtles will be placed in a confined area/container and covered with a wet towel to minimize stress if the animal is alive. The sea turtle will be transported to the support vessel and the observer will notify the support vessel to arrange transport the sea turtle back to land.

## **BEST MANAGEMENT PRACTICES TO PROTECT SEA TURTLES AND MARINE MAMMALS**

### **Skimmer Operations:**

#### **Sea Turtles**

- Use of oil skimmers can adversely affect sea turtles through possible capture and/or entrainment.

#### **Best Management Practices To Reduce Skimmer Impacts to Sea Turtles**

- Collection of all live and dead turtles needs to be conducted according to the attached protocols (attachment 1).
- The best possible mitigative measure would be to have turtle rescue vessels (with trained rescue personnel, if available) accompany selected skimming task forces to search the material to be skimmed and collect all turtles found in the area, before skimming operation begin. If this is not possible then the following should be considered:
  - o Have a trained observer (if available) or a crew member dedicated to looking for sea turtles (and marine mammals) during skimming operations and record each sighting event, including GPS location, species (if known), description of encounter on the attached form (attachment 2).
  - o If possible and if the skimming platform allows (i.e. size of vessel) and there is no risk to human safety collect live and dead sea turtles according to attachment 1.
  - o Contact the Wildlife Hotline (866-557-1401) or your supervisor to report the turtle to the Wildlife Branch immediately.
  - o If possible all Sargassum that is not-oiled or is only very lightly oiled should be avoided.

#### **Marine Mammals:**

- Use of oil skimmers can adversely affect marine mammals through possible capture and/or entrainment.

#### **Best Management Practices To Reduce Skimmer Impacts to Marine Mammals**

- Have a trained observer, if available, or a crew member dedicated to looking for marine mammals that maybe affected by equipment or are impacted by oil.
- Contact the Wildlife Hotline (866-557-1401) or your supervisor to report any marine mammal that is impacted by skimming operations or that has signs of oil impacts to the Wildlife Branch as quickly as possible.
- If possible avoid skimming operations where marine mammals have been spotted, if a marine mammal is spotted during operations, if possible, stop operations until the animal is outside the operations area.

## **In-Situ Burning (Offshore):**

### **Sea Turtles**

- Sea turtles can be adversely affected during corralling of oil and oiled Sargassum or other converged material by being herded by the booms into oil, turtles may also be in the oil already whether or not there is Sargassum present. Any live turtles in the boomed oil and/or oiled Sargassum or other converged material will be burned alive when the oil is ignited

### **Best Management Practices to Reduce In-Situ Burns Impacts to Sea Turtles**

- Collection of all live and dead turtles needs to be conducted according to the attached protocols (attachment 1).
- The best possible mitigative measure would be to have turtle rescue vessels (with trained rescue personnel, if available) accompany the burn taskforce into the burn box and to search all material to rescue turtles prior to burning, while oil is being boomed or otherwise is awaiting burning. If this is not possible then the following should be considered:
  - o Send turtle rescue vessels (with trained rescue personnel, if available) into the next day's projected burn box to search for and rescue turtles. Feasibility will depend on the size of the projected area and whether material has already been boomed or otherwise collected.
  - o Have a trained observer (if available) or a crew member dedicated to looking for sea turtles (and marine mammals) during corralling operations and record each sighting event, including GPS location, species (if known), description of encounter on the attached form (attachment 2).
  - o Contact the Wildlife Hotline (866-557-1401) or your supervisor to report the turtle to the Wildlife Branch immediately.
  - o If possible all Sargassum that is not-oiled or is only very lightly oiled should be avoided.
  - o If possible a survey should be conducted in the burn area after the burn is complete and all dead sea turtles should be counted and if possible collected.

### **Marine Mammals:**

- Marine mammals can be adversely affected by in-situ burns if they are in the burn area during burning. It is expected that marine mammals will avoid the area once the oil is ignited.

### **Best Management Practices to Reduce In-Situ Burns Impacts to Marine Mammals**

- Have a trained observer, if available, or a crew member dedicated to looking for marine mammals that maybe affected by the burn or are impacted by oil.

- Contact the Wildlife Hotline (866-557-1401) or your supervisor to report any marine mammal that is impacted by burn operations or that has signs of oil impacts to the Wildlife Branch as quickly as possible.
- If possible avoid burn operations where marine mammals have been spotted, if a marine mammal is spotted during operations, if possible, stop operations until the animal is outside the operations area.

## Sea Turtle At-Sea Retrieval Protocol

All live and dead sea turtles (includes oiled turtles) should be recorded and retrieved (if possible) and taken to an onshore facility for cleaning and rehabilitation or salvage/necropsy. Animals can be netted at the surface using dipnets or other hoists. Once onboard, sea turtles need to be carefully handled and transported to shore as soon as possible, in accordance with NMFS guidance.

### **BE SURE TO USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT**

(Gloves, Tyvek suits, boots, and goggles if necessary)

Sea Turtle Retrieval Kit (1 per boat) Includes:

- Large Diameter dip net
- Large Rubbermaid Crate
- Large Cotton Towel
- PPE (Gloves, Tyvek, goggles)



1. Bring turtle on board (dipnets are useful for small turtles less than ~3 ft length). Do not pick up turtles by their flippers, but rather, lift them by grasping both sides of the carapace. If the turtle attempts to evade capture, do not pursue. When handling turtles, be aware of the head and flippers – they will bite and have powerful flippers with claws.
2. Determine position at sea (latitude/longitude coordinates as DD.DDDD).
3. Contact the Wildlife Hotline (866-557-1401) or your supervisor to report the turtle to the Wildlife Branch as quickly as possible.
4. Get the towel wet and put it in the bottom of the transport crate. Place the turtle on top of the towel. Put the crate with the turtle inside in the shade. Do not add more water to the crate.
5. If the turtle appears to be dead, follow the same process but roll the towel up to raise the hind end a few inches higher than the head. Keep the crate in the shade. (Note: live turtles may appear comatose for up to 24 hours!)
6. Deliver the sea turtle (live or dead) to the designated Response Center. Transport turtles in individual containers when possible. Be sure to provide location, date and time data, and a chain of custody form with each turtle.

From: John Carlson <John.Carlson@noaa.gov>  
Subject: **Fwd: 2nd file --**  
Date: July 4, 2010 11:49:24 AM CDT  
To: Karla Reece <Karla.Reece@noaa.gov>



► 1 Attachment, 1.6 MB

FYI

Begin forwarded message:

**From:** Alexis Gutierrez <[Alexis.Gutierrez@noaa.gov](mailto:Alexis.Gutierrez@noaa.gov)>  
**Date:** July 4, 2010 10:31:41 AM CDT  
**To:** "Gelakoska, Marianne LCDR" <[Marianne.M.Gelakoska@uscg.mil](mailto:Marianne.M.Gelakoska@uscg.mil)>, John Carlson <[John.Carlson@noaa.gov](mailto:John.Carlson@noaa.gov)>, Ed Levine <[Ed.Levine@noaa.gov](mailto:Ed.Levine@noaa.gov)>, Teri Rowles <[Teri.Rowles@noaa.gov](mailto:Teri.Rowles@noaa.gov)>, [firemandrew876@gmail.com](mailto:firemandrew876@gmail.com), [brian.w.seekins@uscg.mil](mailto:brian.w.seekins@uscg.mil), William Whitmore <[William.Whitmore@noaa.gov](mailto:William.Whitmore@noaa.gov)>, Pamela Lawrence <[Pamela.Lawrence@noaa.gov](mailto:Pamela.Lawrence@noaa.gov)>  
**Subject:** 2nd file --

Here is the training ppt. It was too big to send in the last file. Thank you ! A



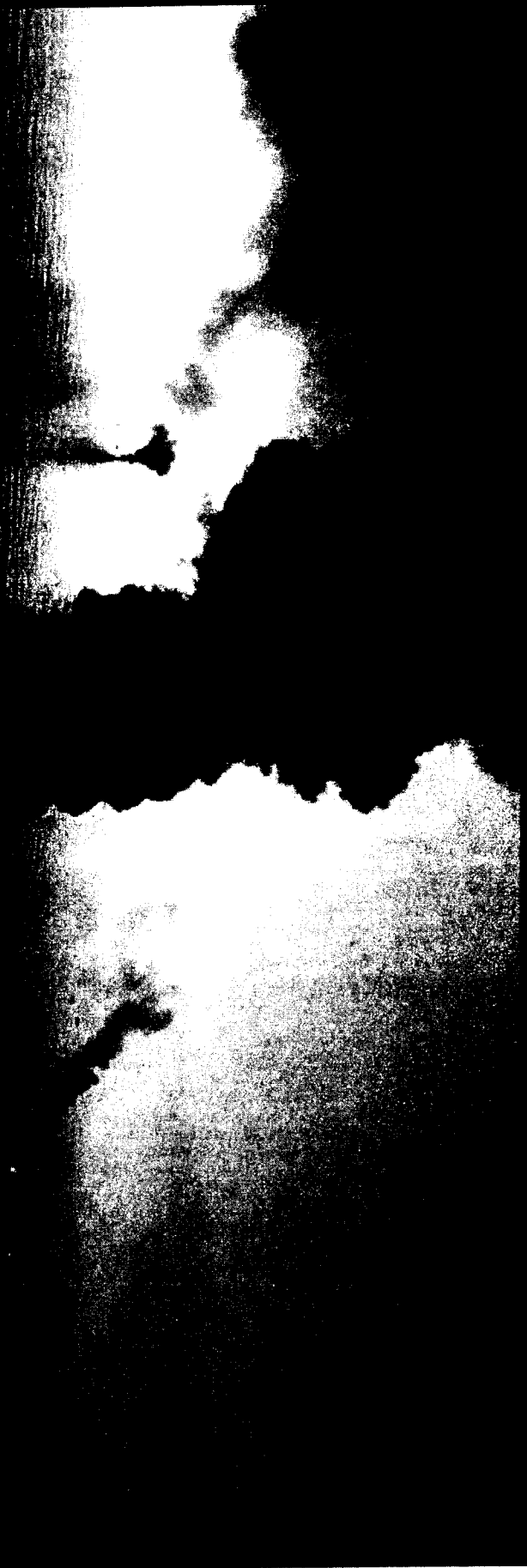
In-situ Burn ....pdf (1.6 MB)



# In-situ Burn Team Observer Training



*A burn team includes a pair of trawlers pulling a boom, an ignition boat, and a support vessel (crew boat)*



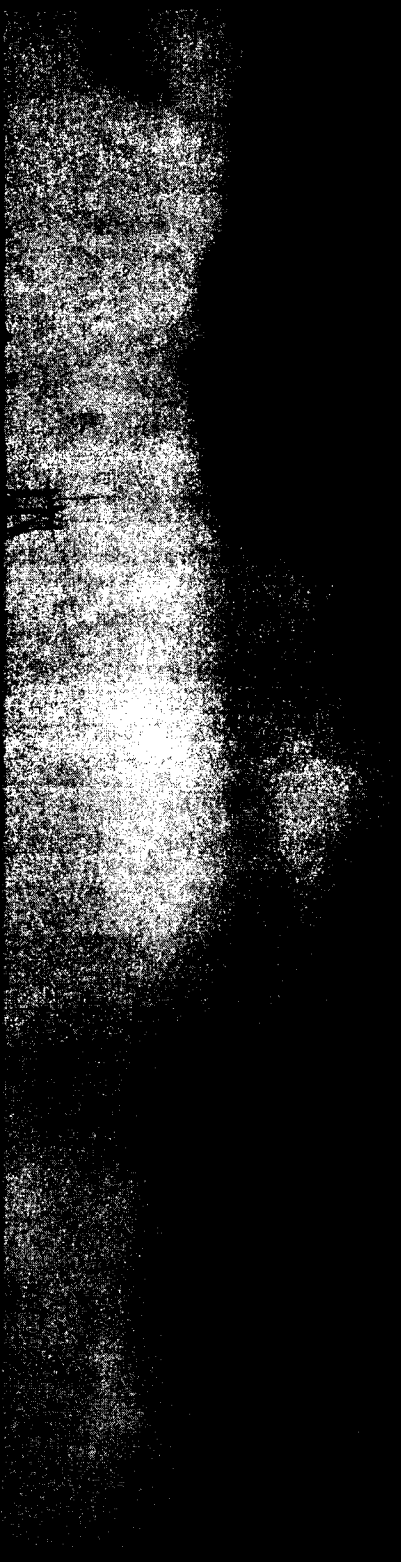
Ignition boat

Boom

Trawlers

Support vessel

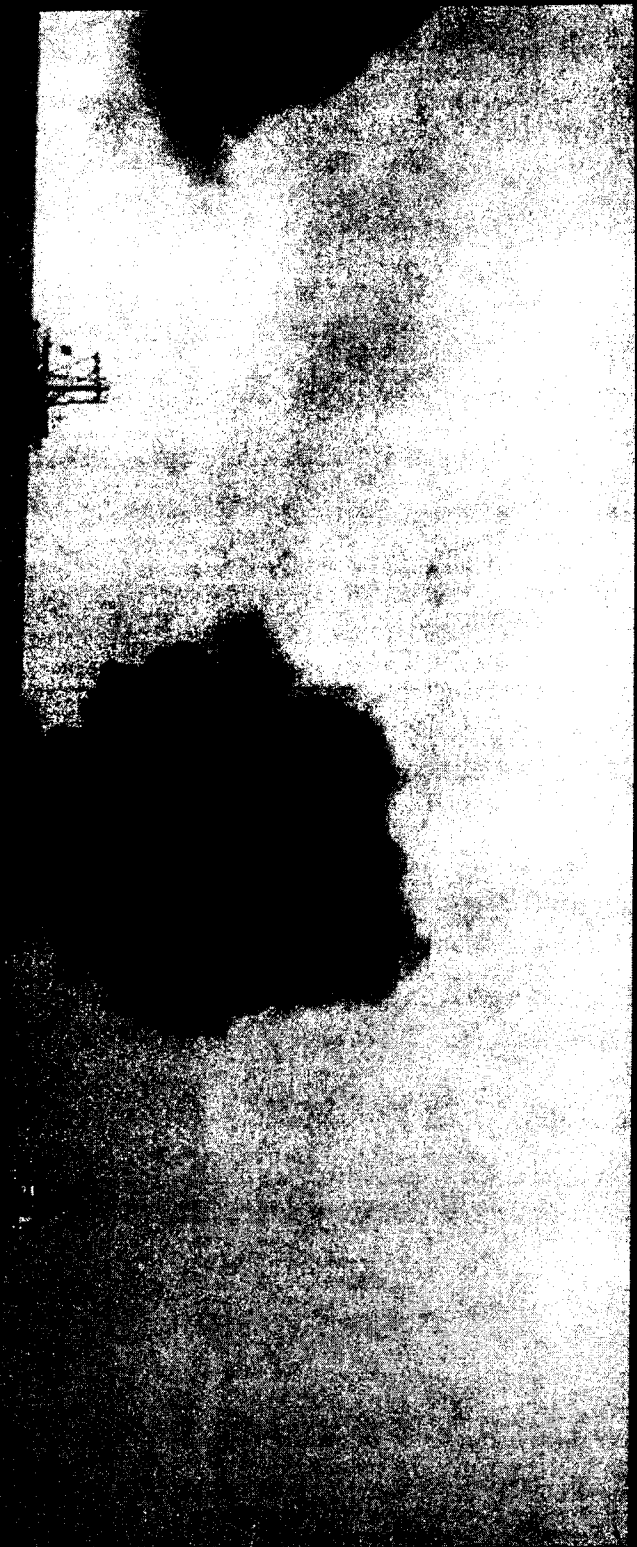
Paired trawlers pull a 500' *boom* at approx.  $\frac{1}{2}$  knot to concentrate oil for burning



A burn is initiated when approx. *half the boom* is filled with oil



Trawlers continue to move forward *during the burn* to add fuel and prolong the burn as long as possible.



Personnel on the ignition boat *monitor several booms* (pairs of trawlers) simultaneously to determine when the oil is suitable for burning.



Ignition boat

Once ignition boat personnel determine the oil is ready for ignition, a *sea turtle survey* is initiated

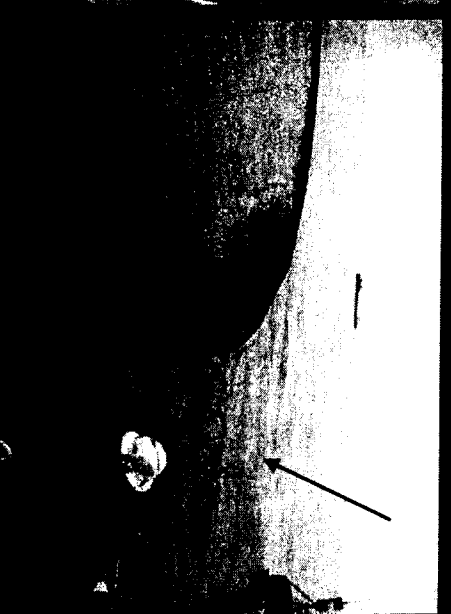


*A sea turtle survey* includes monitoring of 3 areas prior to the burn including: 1) the area in front of the trawlers, 2) oil concentrated in the boom, and 3) any oil trailing behind the boom.



Oil in front of trawlers-

The oil in front of the trawlers may end up in the fire as the trawlers move forward



Oil concentrated in boom-

Oil trailing apex of boom-  
Fires occasionally jump over the apex of the boom if the oil is relatively continuous and burns outside the boom



Observers will note *the type of oil* encountered during the survey

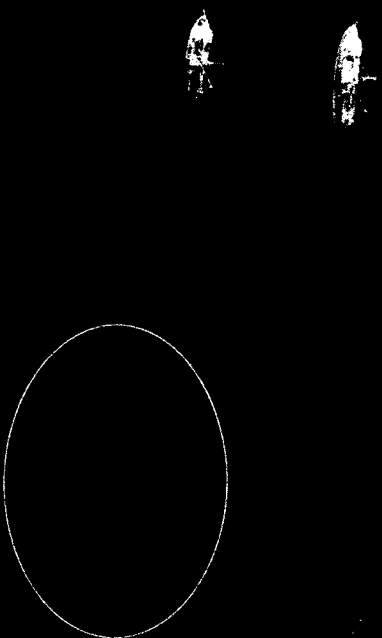


Heavy (dark black/brown)



Brown to peanut color

Observers will note *the type of oil* encountered during the survey

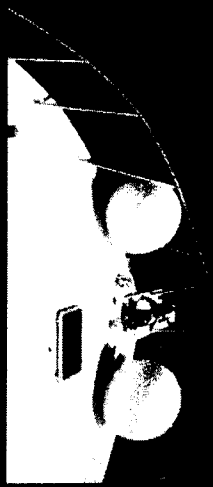


Light (silver/rainbow sheen, metallic brn)

Emulsified (orange)



Observers will note *the type of habitat* encountered during the survey



Sargassum weedline/ No oil

Sargassum weedline/ Oil

Observers will note *the type of habitat* encountered during the survey



Dispersed Sargassum/ No oil

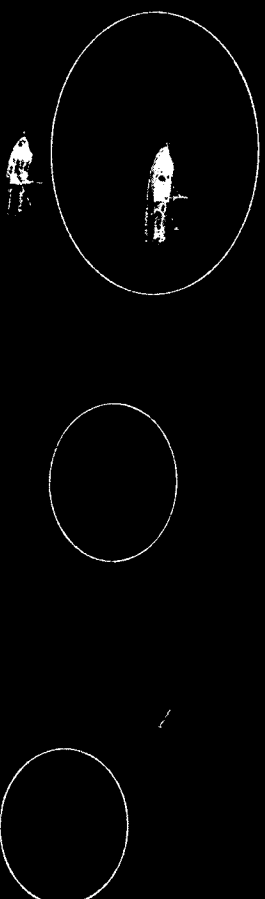
Dispersed Sargassum /Oil

Observers will note *the type of habitat* encountered during the survey

Heavy continuous oil (no sargassum)

We worked in several of these areas, but I don't have a good photo

Dispersed patches of oil (no sargassum)



Observers will monitor for the presence of pelagic phase sea turtles from the foredeck of the ignition boat

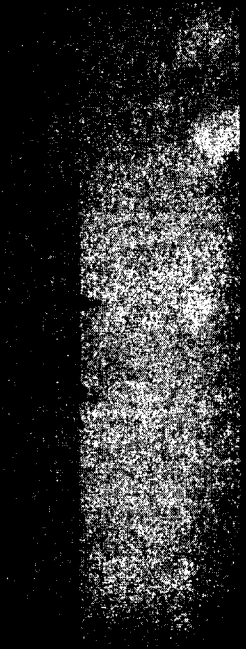
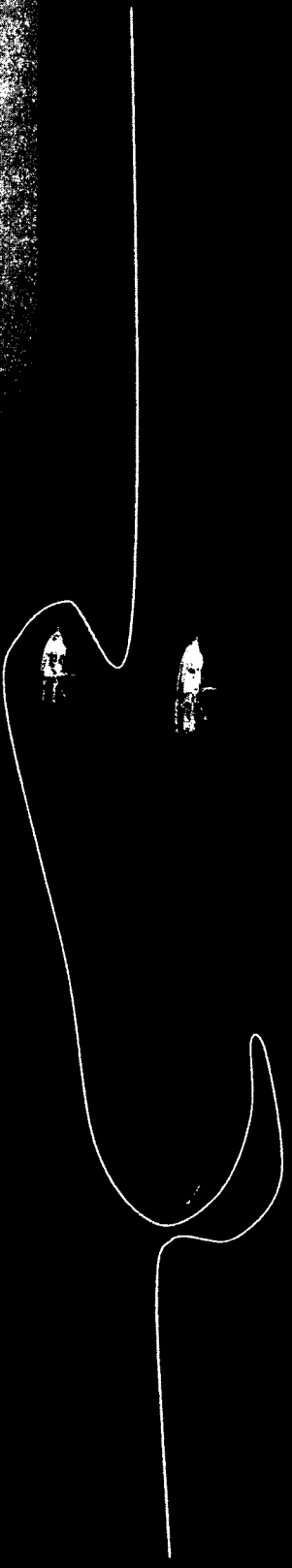


Example of pelagic phase sea turtle in *healthy sargassum*  
*weedline*

Example of pelagic phase sea turtle in *oiled sargassum*  
*weedline*



*A sea turtle survey* will include the monitoring of 3 areas prior to the burn including: 1) the area in front of the trawlers (700 m), 2) oil concentrated in the boom, and 3) any continuous oil trailing behind the boom.



Sea turtles encountered during the survey will be captured with a dip net and transported to the support vessel



Support vessel with 2 ignition boats alongside

Once the sea turtle survey is completed and the 3 survey areas are clear of sea turtles, U.S. Coast Guard personnel will be given permission to begin ignition.



From: John Carlson <John.Carlson@noaa.gov>  
Subject: **revised contract**  
Date: July 4, 2010 12:35:07 PM CDT  
To: teri Rowles <Teri.Rowles@noaa.gov>  
Cc: Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>  
▶ 1 Attachment, 79.5 KB



BP observer ...doc (79.5 KB)

From: John Carlson <john.carlson@noaa.gov>  
Subject: **Re: final observer statement of work**  
Date: July 5, 2010 7:55:04 AM CDT  
To: dwh.mmstlogistics@noaa.gov  
Cc: teri Rowles <Teri.Rowles@noaa.gov>, Alexis Gutierrez  
<Alexis.Gutierrez@noaa.gov>  
▶ 1 Attachment, 76.5 KB



sorry bout that. attached this time



BP observer ...doc (76.5 KB)

On Jul 5, 2010, at 7:35 AM, John Carlson wrote:

Kathy

final version of the observer statement of work

John

## STATEMENT OF WORK

### **C.1. Suggested Contractor**

A.I.S., Inc  
89 North Water Street  
New Bedford, MA 02740  
774-265-0596  
www.aisobservers.com

### **C.2. Project title**

Observer coverage of skimmer (including alternative technologies) and in situ burn vessel units associated with oil removal in the Deep Water Horizon oil spill

### **C.3. Background and objective**

Sea turtles are particularly susceptible to population declines because of their vulnerability to anthropogenic impacts during all life-stages. Commercial and recreational activities can have an adverse effect on sea turtles. For example, various methods used in fisheries, including trawling, pot fisheries, longlines, and gillnets are known to cause fatal interactions with sea turtles. Dredge and fill operations and underwater explosions can cause fatal injuries. As such, many species are listed as threatened or endangered under the United States Endangered Species Act (ESA). Additional background information on the status of sea turtle species can be found in a number of published documents, including recovery plans for the Atlantic green sea turtle (*Chelonia mydas*, NMFS and USFWS 1991a), hawksbill sea turtle (*Eretmochelys imbricata*, NMFS and USFWS 1993), Kemp's ridley sea turtle (*Lepidochelys kempii*, USFWS and NMFS 1992), leatherback sea turtle (*Dermochelys coriacea*, NMFS and USFWS 1992), loggerhead sea turtle (*Caretta caretta*, NMFS and USFWS 1991b).

In efforts to reduce the level of surface oil related to the Deep Water Horizon Oil Spill, the use of in situ burns of oil and gas on the surface of U.S. territorial seas in the Gulf of Mexico has the potential interact and take ESA listed sea turtles including Kemp's ridley, loggerhead but also may include green and leatherback sea turtles. This take is without authorization for the "take" of listed species as required by the ESA. 16 U.S.C. § 1638(a)(1)(A) (prohibiting any person from committing the "take" of listed species "within the United States or the territorial sea of the United States"); 16 U.S.C. § 1532(19) ("The term 'take' means to harass, harm, pursue, attempt to engage in any such conduct."). Moreover, the use of oil skimmers can adversely affect sea turtles through possible capture or entrainment. The magnitude of these marine events is not currently known. Data necessary to estimate the "take" of sea turtles during these activities is required to meet the mandates of the ESA.

### **C.4. Scope**

This solicitation is for the procurement by British Petroleum of "Contractor" to furnish the necessary personnel, material, equipment, services and facilities (except as otherwise specified) to perform the following the Statement of Work/Specifications (see sections C.6 and C.7.). Extensions to this completion date (e.g., due to prolonged periods of inclement weather) may be requested by the Contractor but must be approved by British Petroleum.

### **C.5. Period of performance**

It is anticipated that the Contractor will complete all work by December 31, 2010. However, given the potential for unforeseen delays (e.g., due to inclement weather), the period of performance shall range from time of award to October 31, 2011

### **C.6. Description of work**

The National Marine Fisheries Service (NMFS) requires the recruitment, selection, supervision, and outfitting of observers to fulfill the obligations of Section 7 and 9 of the Endangered Species Act (see sections C.2). The Endangered Species Act requires NMFS to monitor and report on all levels of sea turtle interactions with commercial activities including but not limited to commercial fishing, dredging and dredge spoil dumping, and oil platform removal. NMFS categorizes all of these activities based on the human-caused level of serious injury or mortality of sea turtles.

The work required under this contract is to collect data needed to report levels of interactions with sea turtles and other protected species bycatch. Approximately 100% percent and 25% of the in situ burn and skimmer effort, respectively should be observed by month and area throughout the contracted period. The Wildlife Branch, Operations will work with the Contractor in determining which vessels should be selected, how data will be collected, edited, and submitted, and answer questions or deal with concerns of the BP America, Inc. and the Unified Command for the Deepwater Horizon Oil Spill ("Unified Command"). Observers shall record scientific data on marine species, observe in situ burn and skimmer operations, and collect and return captured sea turtles according to protocols developed by Wildlife Branch, Operations.

#### **1. Objectives**

The primary goal of this Program is to report on the number, condition, and nature of incidental injury and mortality to sea turtles and other protected resources occurring during the course of in situ burn and skimmer operations (including alternative skimming technologies) in U.S. territorial seas in the Gulf of Mexico. Its main objectives are, in order of priority, to: 1) obtain reliable estimates of incidental serious injury and mortality of sea turtles; 2) where possible, remove and coordinate the collection and transport of live injured sea turtles as a result of contamination by oil or skimmer activities to appropriate rehabilitation facilities and 3) record data on other protected species bycatch and discard levels and aspects and procedures of the in situ burn and skimmer activities.

#### **2. Scope of Work**

The contractor shall furnish the necessary personnel, materials, services, facilities (unless otherwise specified in Task Orders), and otherwise do all tasks necessary to perform the work and services called for under this Scope of Work.

The contractor, as an independent contractor and not as an agent of the US Government or BP America, Inc. and the Unified Command for the Deepwater Horizon Oil Spill shall furnish as may be required and ordered by BP America, Inc., services which include environmental, biological, and operations data collection. These activities shall be performed in accordance with the Statement of Work and selected Task Orders and shall be accomplished by contractor personnel in each of the following categories, having qualifications as represented by the

contractor in its proposal listed as follows:

**Living Resource Sampling and Environmental Data Collection**

- Acquire and provide information on in situ burn and skimmer operations and logistics for refinement of sampling design
- Conduct field sampling and data collection on in situ burn and skimmer operations, environmental conditions
- Report on the number, condition, and nature of incidental injury and mortality to sea turtles and other protected resources
- Collect live sea turtles safely and provide on vessel care until transport occurs
- Data quality control

**Program Support Services**

- Assist in the preparation of program specifications and designs
- Provide logistics and operational support for observer deployment
- Equipment operation and maintenance

**3. Program Coordination**

The contractor shall provide overall administrative and contractual support including insurance and liability coverage, and employ the mobile workforce of contracted observers, and other contracted personnel who will collect data and assist in activities required. The contractor shall be responsible for adherence to all federal, state, local, and site-specific safety regulations.

Sampling and data collection will be performed on a flexible work schedule depending on in situ burn and skimmer operations. Consequently, precise work hours or work dates cannot be determined in advance. Work schedules may involve shift or weekend periods.

Sampling will be conducted under a variety of weather and working conditions.

This contract requires 100% percent and 25% observer coverage of the in situ burn and skimmer effort, respectively for each region. However, this level may be modified by the Wildlife Operations/Marine Mammal/Sea Turtle unit accordingly prior to or during operations subject to program coverage needs and the vagaries of in situ burn and skimmer operations. Initial focus of observer coverage should be on those vessel or operations with the highest risk to sea turtles. In addition, the distribution of observers and port assignments may change during the course of this contract as time progresses. It is understood that factors such as weather, changes to in situ burn and skimmer operations, and other unforeseen circumstances may interfere with observer effort and is taken into consideration in program design and data analysis. The Contractor shall determine the number of observers needed per region to meet the initial target coverage rate. The Contractor shall maintain an accurate real time assessment of effort through coordination with the Unified Command for the Deepwater Horizon Oil Spill. Observers shall be resident in the area, either on land or on a staging vessel and travel to meet vessels to meet the coverage needs.

In general, during the in situ burn operations observers shall be stationed on the ignition boat and conduct the survey from a position that optimizes visibility. Data forms will be filled out by the



observer that include information on the time survey begins, location, sea state, a general description of the oil and habitat, and unique information to track the survey data.

A sea turtle survey includes monitoring of 3 areas prior to the burn including; the area in front of the trawlers, oil concentrated in the boom, and any oil trailing behind the boom. As part of the survey, observers will note the type of oil encountered during the survey, the type of habitat (e.g. sea weed or other aquatic vegetation) encountered during the survey.

All attempts will be made to recover sea turtles. Sea turtles that cannot be captured due to safety or other reasons will be recorded. Sea turtles encountered during the survey that can be removed from the oil will be captured with a dip net. The sea turtle will be boarded and the observer will provide a cursory assessment of its status. Data relative to condition, location, and survey phase will be recorded. Sea turtles will be placed in a confined area and covered with a wet towel to minimize stress if the animal is alive. The sea turtle will be transported to the support vessel and the observer will notify the support vessel to transport the sea turtle back to land. Notification back to Wildlife Operations/Sea Turtle/Marine Mammal Unit will also be required. The Contractor in collaboration with the Wildlife Operations/Sea Turtle/Marine Mammal Unit may need to make further modifications to the data form and sampling procedures as more information is gathered

As of July 3, 2010, only an initial assessment of the risk to sea turtles and other protected species has been provided. The Contractor will need to make further observations and modify coverage and directives as more information is gathered. All skimmers have the potential to interact with live sea turtles through impingement and entrainment, and also interact with injured or dead wildlife. The following table ranks the relative risk of skimmers in determining observer coverage to monitor operations and recover sea turtles. Ideally, some data would be collected on all medium and high risk skimming operations. This assessment is based on the available information.

<b>HIGH</b>	<b>MEDIUM</b>	<b>LOW</b>
Big Gulps (offshore and near shore)	TMT A Whale	Dutch arm <sup>f</sup>
Mini-Gulps (passes)	Boom trawlers with floating weirs in heavy oil (offshore) <sup>c</sup>	Drum weirs
Ocean busters <sup>a</sup>	Boom trawlers with sorbents <sup>e</sup>	Disc weirs
Current busters	Belt/mechanical skimmers	Rope mops
Harbor busters		Floating weirs in light-medium oil
USCG floating weir <sup>b</sup>		
Fishing type trawl net boom <sup>d</sup>		

<sup>a</sup> The configuration of all busters is the same, the only difference is size (ocean>current>harbor).

<sup>b</sup> Enclosed net configuration with similar concerns to the busters.

<sup>c</sup> The greatest risk is to juvenile (smaller) sea turtles. The greatest potential risk to turtles from skimmers is becoming entrapped in the boom and funneled toward the weir.

<sup>d</sup> May not be in use.

<sup>e</sup> The ration of boom (above) to skirt (below) is about 1/3 above water to 2/3 below water. The

skirt length ranges between 12 in to about 3 ft. Longer skirts pose greater risks than smaller skirts and could entrap floating or debilitated sea turtles.

<sup>f</sup>Are reported to have debris exclusion devices installed that would also protect sea turtles. Needs to be verified once the arms arrive on scene.

#### 4. Places of Delivery/Performance

The contractor shall perform tasks under the contract in Gulf of Mexico ports and aboard vessels or at set net sites, dependent on the in situ burn and skimmer operations, or as appropriate, at the contractor's facilities.

The following is a representative listing of probable observer operation locations:

- 1) Houma, Louisiana
- 2) Mobile, Alabama
- 3) Venice, Louisiana
- 4) Port Fourchon, Louisiana

#### 5. Description of Labor

The following direct labor categories are required to perform the anticipated contract. All categories are described in a generic manner; however, each category is required to have background, experience, and education.

Observer Coordinator--Task coordinator shall have experience in the scientific environment with emphasis on observer management and deployment, which will be required in each specific Task Order. Specific duties are organizing and controlling the contracted service, managing and directing subordinates and subcontracted observers, reporting to the contract technical management and controlling the tasks' administrative, personnel, and operations activities.

Experience required-- At least 3 years experience in managing such tasks is required.

Education required--A Bachelor's degree or higher related to the requirements of the specific Task Order is required.

Fishery Observers--Collects data as required in the performance of the contract. Definitions and levels are defined by the Department of Labor. See Section C.2.6.a. below for required observer experience and education.

Fishery Observer--Independently executes duties, resolving exceptions and special problems or to make adaptations in the procedures. Collects observational, environmental, and biological data according to detailed procedures. According to established standards and detailed procedures, records data on appropriate paper or electronic forms and logs. Maintains field equipment and supplies. May enter and transfer data electronically.

#### 6. Observer qualifications, responsibilities, and duties

At a minimum, 75% of the observer workforce shall have a Bachelor's degree in the natural sciences. Individuals that do not meet degree requirement shall be evaluated based upon observing experience, academic standing, personality attributes, physical fitness, and overall

experience. All observers must meet the following standards:

a. Academic background and experience. Candidates must have a Bachelor's or higher degree in the biological sciences from an accredited college or university with a minimum of 30 semester hours in applicable biological sciences, and at least one undergraduate course in math, statistics, or computer science OR 3 years experience as skipper or first mate.

b. Personality attributes. The mental and emotional demands on observers are rigorous. Candidates shall be mature and capable of working independently without direct supervision under stressful conditions. They shall be self-motivated, possess good judgment, and be able to work and live in close quarters with other individuals in a professional and respectful manner.

c. Good physical condition. All observers must have passed a complete physical examination within the 6 months prior to deployment.

d. CPR. Observers must be CPR-trained and have a current certification prior to the training. It should be the observer's responsibility to ensure proper re-certification or renewal to maintain certification. A copy of the CPR card shall be provided to the Contractor by the observer.

f. Background Checks. Criminal background checks will be performed for each observer. The COTR will review the results on a case-by-case basis and retains the right to deny accepting a candidate based on the information provided.

g. Observer Training. All observers must successfully complete the training course.

h. Standards of Conduct for Observers. The observer must avoid any behavior that could adversely affect the confidence of the public in the integrity of the Observer Program. Observers shall conduct themselves in a manner that will reflect favorably upon the Observer Program by maintaining high standards of honesty, integrity, impartiality, and conduct in all situations.

Observers:

- (1) Must diligently perform their assigned duties;
- (2) Must accurately record their sampling data, write complete reports, and report honestly;
- (3) Must protect the confidentiality of all collected data and observations made on board vessels. Observers shall not use any data collected under this contract for purposes other than the performance of this contract nor shall observers retain, release, reproduce, distribute, or publish any of the data without prior approval;
- (4) Must refrain from engaging in any illegal actions or any other activities that would reflect negatively on their own or others' image(s) as professional observers or on the Observer Program as a whole. This would include, but is not limited to:
  - (a) Engaging in excessive drinking of alcoholic beverages;
  - (b) Engaging in the use or distribution of illegal drugs;
  - (d) Engaging in criminal, dishonest, disrespectful, or disgraceful conduct that may be perceived as prejudicial to the Government.

Behavior that is contrary to these standards or to the intent of these standards would be

considered grounds for disqualifying the offending observer or termination of any observer subcontract. Falsification of observer data is grounds for dismissal.

**C.7. Estimated budget**

Period of contract= 6 months

-Costs include all observer costs for up to 60 individuals (includes salary, travel, equipment, hotels, taxis, etc.)

-Program management includes 1 Program Manager, 4 Area Coordinators, 1 Data Manager and 1 Assistant Program Manager

-Office personnel includes 1 Administrative Assistant, 2 Data Entry persons and 1 gear person

Estimated Budget= \$7,500,000

From: John Carlson <John.Carlson@noaa.gov>  
Subject: **Re: Need info on observer program**  
Date: July 5, 2010 12:09:01 PM CDT  
To: Teresa Turk <teresa.turk@noaa.gov>



for now, hows this:

Observer programs are currently being developed to further collect data and evaluate the potential interactions of sea turtles with in situ burning of oil and skimmer activities in the Gulf of Mexico.

On Jul 5, 2010, at 10:24 AM, Teresa Turk wrote:

Any general details you can provide would be helpful and I will place a caveat that this is the plan RIGHT NOW and remark that is changing daily/hourly.

Teresa

John Carlson wrote:

Hi Teresa

I just spoke with Alexis about this and the observer program for the in situ burn and skimmer activities and its not really ready for prime time. This is such a moving target and things seem to change on a daily basis. We'll know more as we get more observations of the activities

John

On Jul 5, 2010, at 9:20 AM, Teresa Turk wrote:

Hey Gang,

I know you are super busy but I need some information from you all. Next week I am giving a presentation in Bogota on US fish observer programs AND they requested that I discuss Protected Species Observer Programs in the US and around the world (yikes!). I wanted to mention the latest developments in the GOM. Can you please just send me or call me if it is more convenient (206.713.2265) the details as you know them today. \_I will need this information today or tomorrow (as I give the talk on Thursday and will be in flight most of Wednesday).\_\_

For example, how many observers will be deployed?

Which vessels will they be on?

What is the expected duration of the observations? LT, ST? Only activities involving skimming or burning?

Who will conduct training, briefing, debriefing?

Who will analyze and store the data?

I realize you are just getting started but this new program highlights how important observers are in all sorts of activities.

Thanks for your help,  
Teresa

<Teresa\_Turk.vcf>

<Teresa\_Turk.vcf>

From: John Carlson <John.Carlson@noaa.gov>  
Subject: **MoveOn.org Political Action: BP is burning endangered sea turtles alive**  
Date: July 6, 2010 5:32:32 PM CDT  
To: Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Teri Rowles  
<Teri.Rowles@noaa.gov>, Luke Szymanski <Luke@aisobservers.com>



did you see this???

<http://pol.moveon.org/seaturtles/?rc=fb.2>

From: Teresa Turk <Teresa.Turk@noaa.gov>  
Subject: **[Fwd: Observer SOW through MSA]**  
Date: September 2, 2010 10:33:14 AM CDT  
To: John Carlson <John.Carlson@noaa.gov>  
▶ 3 Attachments, 50.4 KB

FYI if you need to go through the MSA between BP and AIS

Teresa

From: Teresa Turk <Teresa.Turk@Noaa.gov>  
Date: August 30, 2010 3:17:50 PM CDT  
To: Nicole Le Boeuf <Nicole.Leboeuf@noaa.gov>  
Cc: Chris Rilling <Chris.Rilling@noaa.gov>, Teri Rowles <Teri.Rowles@noaa.gov>, Sarah Wilkin <Sarah.Wilkin@noaa.gov>, Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, William Michaels <William.Michaels@noaa.gov>, Ralph Lopez <Ralph.Lopez@noaa.gov>, Rick Brown <Rick.Brown@noaa.gov>, Lisa DesFosse <Lisa.Desfosse@noaa.gov>  
Subject: **Observer SOW through MSA**

Hi All,

Attached is the statement of work from the BP-AIS observer contract. As we discussed, increasing the amount of funds to be used toward observer procurement in the PRFA is the recommended solution to this situation. However if increasing the PRFA amount is not possible, then you may want to consider modifying the existing master service agreement (MSA) between BP and AIS if you can obtain approval from BP to do so. The agreement is for over \$6,000,000 for up to 60 observers. An initial 20 observers were authorized for deployment with roughly \$170,000 spent to date. Therefore there is quite a bit of room on this MSA to cover additional observers if approved by BP. However someone will need to also obtain authorization to lift the 20 observer cap to allow for an increased number of observers and greater flexibility.

If BP agrees to the modification, someone will need to work with Richard Lewis (lewis.richard@bp.com) or David Dawley (david.dawley@bp.com) to have Michael Steinberg (michael.steinberg@bp.com) modify the statement of work. The financial portion should remain the same. Someone will also need to contact AIS immediately and let them know that they will need to provide observers for this project.

Suggested language for modifying the SOW is as follows:  
Page 1, para "Objectives"

Add a new paragraph to the section.  
Observers may be also used to coordinate, process, transport and any other activities identified in the Enhancing Seafood Surveillance and Safety scope of work (or whatever the final document is titled)

page 1, para "Scope of Work"  
Under Living Resource Sampling and Environmental Data Collection, add



a bullet

-Collect, process, and transport samples as described in the Enhancing Seafood Surveillance and Safety" scope of work.

Let me know if you need anything else,  
Teresa



BP observer ....pdf (49.8 KB)Teresa Turk.vcf (0.3 KB)



Teresa Turk.vcf (0.3 KB)

## STATEMENT OF WORK

### **C.1. Suggested Contractor**

A.I.S., Inc  
89 North Water Street  
New Bedford, MA 02740  
774-265-0596  
www.aisobservers.com

### **C.2. Project title**

Observer coverage of skimmer (including alternative technologies) and in situ burn vessel units associated with oil removal in the Deep Water Horizon oil spill

### **C.3. Background and objective**

Sea turtles are particularly susceptible to population declines because of their vulnerability to anthropogenic impacts during all life-stages. Commercial and recreational activities can have an adverse effect on sea turtles. For example, various methods used in fisheries, including trawling, pot fisheries, longlines, and gillnets are known to cause fatal interactions with sea turtles. Dredge and fill operations and underwater explosions can cause fatal injuries. As such, many species are listed as threatened or endangered under the United States Endangered Species Act (ESA). Additional background information on the status of sea turtle species can be found in a number of published documents, including recovery plans for the Atlantic green sea turtle (*Chelonia mydas*, NMFS and USFWS 1991a), hawksbill sea turtle (*Eretmochelys imbricata*, NMFS and USFWS 1993), Kemp's ridley sea turtle (*Lepidochelys kempii*, USFWS and NMFS 1992), leatherback sea turtle (*Dermochelys coriacea*, NMFS and USFWS 1992), loggerhead sea turtle (*Caretta caretta*, NMFS and USFWS 1991b).

In efforts to reduce the level of surface oil related to the Deep Water Horizon Oil Spill, the use of in situ burns of oil and gas on the surface of U.S. territorial seas in the Gulf of Mexico has the potential interact and take ESA listed sea turtles including Kemp's ridley, loggerhead but also may include green and leatherback sea turtles. This take is without authorization for the "take" of listed species as required by the ESA. 16 U.S.C. § 1638(a)(1)(A) (prohibiting any person from committing the "take" of listed species "within the United States or the territorial sea of the United States"); 16 U.S.C. § 1532(19) ("The term 'take' means to harass, harm, pursue, attempt to engage in any such conduct."). Moreover, the use of oil skimmers can adversely affect sea turtles through possible capture or entrainment. The magnitude of these marine events is not currently known. Data necessary to estimate the "take" of sea turtles during these activities is required to meet the mandates of the ESA.

### **C.4. Scope**

This solicitation is for the procurement by British Petroleum of "Contractor" to furnish the necessary personnel, material, equipment, services and facilities (except as otherwise specified) to perform the following the Statement of Work/Specifications (see sections C.6 and C.7.). Extensions to this completion date (e.g., due to prolonged periods of inclement weather) may be requested by the Contractor but must be approved by British Petroleum.

### **C.5. Period of performance**

It is anticipated that the Contractor will complete all work by December 31, 2010. However, given the potential for unforeseen delays (e.g., due to inclement weather), the period of performance shall range from time of award to October 31, 2011

### **C.6. Description of work**

The National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service requires the recruitment, selection, supervision, and outfitting of observers to fulfill the obligations of Section 7 and 9 of the Endangered Species Act (see sections C.2). The Endangered Species Act requires NMFS to monitor and report on all levels of sea turtle and other protected species interactions with commercial activities including but not limited to commercial fishing, dredging and dredge spoil dumping, and oil platform removal.

The work required under this contract is to collect data needed to report levels of interactions with sea turtles and other protected species bycatch. Approximately 100% percent for in-situ burn and 25% of the skimmer effort, respectively should be observed by month and area throughout the contracted period. The Wildlife Branch, Operations will work with the Contractor in determining which vessels should be selected, how data will be collected, edited, and submitted, and answer questions or deal with concerns of the BP America, Inc. and the Unified Command for the Deepwater Horizon Oil Spill ("Unified Command"). Observers shall record scientific data on marine species, observe in situ burn and skimmer operations, and collect and return captured sea turtles according to protocols developed by Wildlife Branch, Operations.

#### **1. Objectives**

The primary goal of this Program is to report on the number, condition, and nature of incidental injury and mortality to sea turtles and other protected resources occurring during the course of in situ burn and skimmer operations (including alternative skimming technologies) in U.S. territorial seas in the Gulf of Mexico. Its main objectives are, in order of priority, to: 1) obtain reliable estimates of incidental serious injury and mortality of sea turtles and other protected species; 2) where possible, remove and coordinate the collection and transport of live injured sea turtles as a result of contamination by oil or skimmer activities to appropriate rehabilitation facilities and 3) record data on other protected species bycatch and discard levels and aspects and procedures of the in situ burn and skimmer activities.

#### **2. Scope of Work**

The contractor shall furnish the necessary personnel, materials, services, facilities (unless otherwise specified in Task Orders), and otherwise do all tasks necessary to perform the work and services called for under this Scope of Work.

The contractor, as an independent contractor and not as an agent of the US Government or BP America, Inc. and the Unified Command for the Deepwater Horizon Oil Spill shall furnish as may be required and ordered by BP America, Inc., services which include environmental, biological, and operations data collection. These activities shall be performed in accordance with the Statement of Work and selected Task Orders and shall be accomplished by contractor personnel in each of the following categories, having qualifications as represented by the contractor in its proposal listed as follows:

#### Living Resource Sampling and Environmental Data Collection

- Acquire and provide information on in situ burn and skimmer operations and logistics for refinement of sampling design
- Conduct field sampling and data collection on in situ burn and skimmer operations, environmental conditions
- Report on the number, condition, and nature of incidental injury and mortality to sea turtles and other protected resources
- Collect live sea turtles safely and provide on vessel care until transport occurs
- Data quality control

#### Program Support Services

- Assist in the preparation of program specifications and designs
- Provide logistics and operational support for observer deployment
- Equipment operation and maintenance

### 3. Program Coordination

The contractor shall provide overall administrative and contractual support including insurance and liability coverage, and employ the mobile workforce of contracted observers, and other contracted personnel who will collect data and assist in activities required. The contractor shall be responsible for adherence to all federal, state, local, and site-specific safety regulations.

Sampling and data collection will be performed on a flexible work schedule depending on in situ burn and skimmer operations. Consequently, precise work hours or work dates cannot be determined in advance. Work schedules may involve shift or weekend periods.

Sampling will be conducted under a variety of weather and working conditions.

This contract requires 100% percent for in-situ burns and 25% observer coverage for skimmer effort, respectively for each region. However, this level may be modified by the Wildlife Operations/Marine Mammal/Sea Turtle unit accordingly prior to or during operations subject to program coverage needs and the vagaries of in situ burn and skimmer operations. Initial focus of observer coverage should be on those vessel or operations with the highest risk to sea turtles. In addition, the distribution of observers and port assignments may change during the course of this contract as time progresses. It is understood that factors such as weather, changes to in situ burn and skimmer operations, and other unforeseen circumstances may interfere with observer effort and is taken into consideration in program design and data analysis. The Contractor shall determine the number of observers needed per region to meet the initial target coverage rate. The Contractor shall maintain an accurate real time assessment of effort through coordination with the Unified Command for the Deepwater Horizon Oil Spill. Observers shall be resident in the area, either on land or on a staging vessel and travel to meet vessels to meet the coverage needs.

In general, during the in situ burn operations observers shall be stationed on the ignition boat and conduct the survey from a position that optimizes visibility. Data forms will be filled out by the

observer that include information on the time survey begins, location, sea state, a general description of the oil and habitat, and unique information to track the survey data.

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All attempts will be made to recover sea turtles. Sea turtles that cannot be captured due to safety or other reasons will be recorded. Sea turtles encountered during the survey that can be removed from the oil will be captured with a dip net. The sea turtle will be boarded and the observer will provide a cursory assessment of its status. Data relative to condition, location, and survey phase will be recorded. Sea turtles will be placed in a confined area and covered with a wet towel to minimize stress if the animal is alive. The sea turtle will be transported to the support vessel and the observer will notify the support vessel to transport the sea turtle back to land. Notification back to Wildlife Operations/Sea Turtle/Marine Mammal Unit will also be required. The Contractor in collaboration with the Wildlife Operations/Sea Turtle/Marine Mammal Unit may need to make further modifications to the data form and sampling procedures as more information is gathered

An initial assessment of the risk to sea turtles and other protected species has been provided. This risk assessment is based on current information provided to the Wildlife Operations. This assessment will be refined as observers are deployed to conduct preliminary assessments on the various on-water activities. The Contractor will need to make further observations and modify coverage and directives as more information is gathered. All skimmers have the potential to interact with live sea turtles through impingement and entrainment, and also interact with injured or dead wildlife. The following table ranks the relative risk of skimmers in determining observer coverage to monitor operations and recover sea turtles. Ideally, some data would be collected on all medium and high risk skimming operations. This assessment is based on the available information.

<b>HIGH</b>	<b>MEDIUM</b>	<b>LOW</b>
Big Gulps (offshore and near shore)	TMT A Whale	Dutch arm <sup>f</sup>
Mini-Gulps (passes)	Boom trawlers with floating weirs in heavy oil (offshore) <sup>c</sup>	Drum weirs
Ocean busters <sup>a</sup>	Boom trawlers with sorbents <sup>c</sup>	Disc weirs
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USCG floating weir <sup>b</sup>		
Fishing type trawl net boom <sup>d</sup>		

<sup>a</sup> The configuration of all busters is the same, the only difference is size (ocean>current>harbor).

<sup>b</sup> Enclosed net configuration with similar concerns to the busters.

<sup>c</sup> The greatest risk is to juvenile (smaller) sea turtles. The greatest potential risk to turtles from skimmers is becoming entrapped in the boom and funneled toward the weir.

<sup>d</sup>May not be is use.

<sup>e</sup>The ration of boom (above) to skirt (below) is about 1/3 above water to 2/3 below water. The skirt length ranges between 12 in to about 3 ft. Longer skirts pose greater risks than smaller skirts and could entrap floating or debilitated sea turtles.

<sup>f</sup>Are reported to have debris exclusion devices installed that would also protect sea turtles. Needs to be verified once the arms arrive on scene.

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The contractor shall perform tasks under the contract in Gulf of Mexico ports and aboard vessels or at set net sites, dependent on the in situ burn and skimmer operations, or as appropriate, at the contractor's facilities.

The following is a representative listing of probable observer operation locations:

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- 2) Mobile, Alabama
- 3) Venice, Louisiana
- 4) Port Fourchon, Louisiana

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The following direct labor categories are required to perform the anticipated contract. All categories are described in a generic manner; however, each category is required to have background, experience, and education.

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Experience required-- At least 3 years experience in managing such tasks is required.

Education required--A Bachelor's degree or higher related to the requirements of the specific Task Order is required.

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Fishery Observer--Independently executes duties, resolving exceptions and special problems or to make adaptations in the procedures. Collects observational, environmental, and biological data according to detailed procedures. According to established standards and detailed procedures, records data on appropriate paper or electronic forms and logs. Maintains field equipment and supplies. May enter and transfer data electronically.

#### 6. Observer qualifications, responsibilities, and duties

At a minimum, 75% of the observer workforce shall have a Bachelor's degree in the natural

sciences. Individuals that do not meet degree requirement shall be evaluated based upon observing experience, academic standing, personality attributes, physical fitness, and overall experience. All observers must meet the following standards:

- a. Academic background and experience. Candidates must have a Bachelor's or higher degree in the biological sciences from an accredited college or university with a minimum of 30 semester hours in applicable biological sciences, and at least one undergraduate course in math, statistics, or computer science OR 3 years experience as skipper or first mate.
- b. Personality attributes. The mental and emotional demands on observers are rigorous. Candidates shall be mature and capable of working independently without direct supervision under stressful conditions. They shall be self-motivated, possess good judgment, and be able to work and live in close quarters with other individuals in a professional and respectful manner.
- c. Good physical condition. All observers must have passed a complete physical examination within the 6 months prior to deployment.
- d. CPR. Observers must be CPR-trained and have a current certification prior to the training. It should be the observer's responsibility to ensure proper re-certification or renewal to maintain certification. A copy of the CPR card shall be provided to the Contractor by the observer.
- f. Background Checks. Criminal background checks will be performed for each observer. The COTR will review the results on a case-by-case basis and retains the right to deny accepting a candidate based on the information provided.
- g. Observer Training. All observers must successfully complete the training course.
- h. Standards of Conduct for Observers. The observer must avoid any behavior that could adversely affect the confidence of the public in the integrity of the Observer Program. Observers shall conduct themselves in a manner that will reflect favorably upon the Observer Program by maintaining high standards of honesty, integrity, impartiality, and conduct in all situations. Observers:
  - (1) Must diligently perform their assigned duties;
  - (2) Must accurately record their sampling data, write complete reports, and report honestly;
  - (3) Must protect the confidentiality of all collected data and observations made on board vessels. Observers shall not use any data collected under this contract for purposes other than the performance of this contract nor shall observers retain, release, reproduce, distribute, or publish any of the data without prior approval;
  - (4) Must refrain from engaging in any illegal actions or any other activities that would reflect negatively on their own or others' image(s) as professional observers or on the Observer Program as a whole. This would include, but is not limited to:
    - (a) Engaging in excessive drinking of alcoholic beverages;
    - (b) Engaging in the use or distribution of illegal drugs;
    - (d) Engaging in criminal, dishonest, disrespectful, or disgraceful conduct that may be perceived as prejudicial to the Government.

Behavior that is contrary to these standards or to the intent of these standards would be considered grounds for disqualifying the offending observer or termination of any observer subcontract. Falsification of observer data is grounds for dismissal.

**C.7. Estimated budget**

Period of contract up to 6 months

- Costs include all observer costs for up to 60 individuals (includes salary, travel, equipment, hotels, taxis, etc.)
- Program management includes 1 Program Manager, 4 Area Coordinators, 1 Data Manager and 1 Assistant Program Manager
- Office personnel includes 1 Administrative Assistant, 2 Data Entry persons and 1 gear person

Estimated Budget= \$6,026,940.47





**Subject:** [Fwd: FW: Burn Volume Calculation Protocol]

**From:** Robert Hoffman <Robert.Hoffman@noaa.gov>

**Date:** Wed, 09 Jun 2010 16:41:57 -0400

**To:** Lisa Symons <Lisa.Symons@noaa.gov>, Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>, Sarah Wilkin <Sarah.Wilkin@noaa.gov>, Jessica Powell <Jessica.Powell@noaa.gov>, David Bernhart <David.Bernhart@noaa.gov>

check out the web site and attached doc. stating to get info or at the very least learning where to find it. I think I will be getting areas burned soon also. <http://192.168.1.55/log.htm>

----- Original Message -----

**Subject:**FW: Burn Volume Calculation Protocol

**Date:**Wed, 09 Jun 2010 21:32:10 +0100

**From:**Kittelson, Amanda <Amanda.Kittelson@bp.com>

**To:**Robert Hoffman <Robert.Hoffman@noaa.gov>

Amanda H. Kittelson, PE  
> Global Supply Chain  
HSSE Coordinator  
> BP Lubricants USA Inc.

>  
801 Wharf Street  
Richmond, CA 94804  
Office: 510.236.6312 x121  
> E-mail: [amanda.kittelson@bp.com](mailto:amanda.kittelson@bp.com)  
> Cell: 415.260.6292  
> Fax: 510.236.4331

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>  
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>  
>  
> From: Mabile, Nere  
> Sent: Saturday, May 22, 2010 7:11 PM  
> To: [garyo@genwest.com](mailto:garyo@genwest.com)  
> Cc: [alan@spiltec.com](mailto:alan@spiltec.com); 'Donnie Wilson'; 'Andrew Jaeger'; [rjschrader3@comcast.net](mailto:rjschrader3@comcast.net); [ash](mailto:ash)  
> Subject: Burn Volume Calculation Protocol

>  
> Gary,  
>  
> Please see the attached Volume Estimation Protocol developed to depict how we are doing  
>  
> .> > <<Volume Estimation Protocol\_Controlled Burnsv5.pdf>>

>  
> Neré Mabile  
> Integrity Management Engineer  
> GoM Deepwater SPU - Atlantis Team  
> BP Exploration and Production Inc.  
> Office: 281-366-8418  
> Cell: 281-989-9566

>  
>  
>

**Volume Estimation Protocol\_Controlled Burnsv5.pdf**

**Content-Type:** application/octet-stream  
**Content-Encoding:** base64







Re: Contact - Insitu burn unit

**Subject:** Re: Contact - Insitu burn unit  
**From:** Jordan Stout <Jordan.Stout@noaa.gov>  
**Date:** Fri, 11 Jun 2010 21:48:00 -0400  
**To:** "Alexis.Gutierrez@noaa.gov" <Alexis.Gutierrez@noaa.gov>  
**CC:** "jordan.stout@noaa.gov" <Jordan.Stout@noaa.gov>

Thanks for your input.

--

(Sent from my Blackberry)

Jordan Stout  
Scientific Support Coordinator  
NOAA Emergency Response Division  
Coast Guard Island, Bldg 50-7  
Alameda, CA 94501-5000  
O: (510)437-5344  
F: (510)437-3247  
C: (206)321-3320  
24-hour NOAA spill hotline: (206)526-4911

----- Original Message -----

From: Alexis.Gutierrez@noaa.gov <Alexis.Gutierrez@noaa.gov>  
To: jordan.stout@noaa.gov <jordan.stout@noaa.gov>  
Sent: Fri Jun 11 21:37:00 2010  
Subject: Contact - Insitu burn unit

Contact Chief Schraeder re: status of nearshore burns - birds, turtles - bad idea



Confirm I gave burn box coordinates to onwater team

**Subject:** Confirm I gave burn box coordinates to onwater team

**From:** "Barbara.Schroeder" <Barbara.Schroeder@noaa.gov>

**Date:** Mon, 14 Jun 2010 09:32:35 -0400

**To:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Sarah Wilkin <Sarah.Wilkin@noaa.gov>, Michael Ziccardi <mhziccardi@ucdavis.edu>, Robert Hoffman <Robert.Hoffman@noaa.gov>

Just letting everyone know I connected with the team and gave them today's burn box coordinates. I will re-contact them if the box is adjusted and we get new coordinates during the day.







[Fwd: Fw: Burning Sea Turtles?]

**Subject:** [Fwd: Fw: Burning Sea Turtles?]

**From:** "Barbara.Schroeder" <Barbara.Schroeder@noaa.gov>

**Date:** Wed, 16 Jun 2010 11:13:56 -0400

**To:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Michael Ziccardi <mhziccardi@ucdavis.edu>, David Cottingham <David.Cottingham@noaa.gov>, Helen Golde <Helen.Golde@noaa.gov>, Teri Rowles <Teri.Rowles@noaa.gov>

I have been telling my agency for weeks about this.

----- Forwarded by Janet Mizzi/R4/FWS/DOI on 06/16/2010 11:01 AM -----

**Gloria Bell/ARL/R9/FWS/DOI**

To CHRISTOPHER LUCASH <[otterman@wildblue.net](mailto:otterman@wildblue.net)>

cc [janet\\_mizzi@fws.gov](mailto:janet_mizzi@fws.gov)

06/16/2010 10:41 AM

Subject Re: Burning Sea Turtles? [Link](#)

Thanks, Chris. I'm cc'ing Janet Mizzi in R4 so they can look into it.

Gloria Bell  
Deputy Assistant Director for Endangered Species  
U.S. Fish and Wildlife Service  
4401 N. Fairfax Drive, Room 420  
Arlington, VA 22203  
703/358-2171 office  
703/358-1941 direct  
571/730-8214 mobile  
703/358-1735 fax  
[gloria\\_bell@fws.gov](mailto:gloria_bell@fws.gov)

CHRISTOPHER LUCASH <[otterman@wildblue.net](mailto:otterman@wildblue.net)>

06/15/2010 07:58 PM

To [gloria\\_bell@fws.gov](mailto:gloria_bell@fws.gov)

CC:

Subject Burning Sea Turtles?

Gloria,

I am sending this from home because I just found out. Please see the linked YouTube video and try to get to the bottom of it. My wife saw this and was in hysterics. I know much of the info out there is questionable, but the man interviewed seems intelligent, calm and believable.

[http://www.youtube.com/watch?v=4kjl3\\_bMk8o](http://www.youtube.com/watch?v=4kjl3_bMk8o)

Thank you,

Chris Lucash  
USFWS Red Wolf Biologist  
Manteo, NC





UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE

FILE # 1514-2242  
1995

Southeast Regional Office  
9721 Executive Center Dr. N.  
St. Petersburg, FL 33702

March 17, 1995 F/SEO13:DMB

Captain Gerald W. Abrams, USCG  
Chief, Marine Safety Division  
Seventh Coast Guard District  
Brickell Plaza  
Federal Building  
909 SE First Avenue  
Miami, Florida 33131-3050

Dear Captain Abrams:

This responds to your February 3, 1995 letter regarding the proposed policy to pre-authorize Federal On-Scene Coordinators (FOSCs) to conduct in-situ burning as an oil-spill response measure. A Biological Assessment (BA) was submitted pursuant to Section 7 of the Endangered Species Act of 1973 (ESA). We concur with the finding of the BA that the proposed policy is unlikely to adversely affect endangered or threatened species under National Marine Fisheries Service (NMFS) purview or their critical habitat.

The BA listed a number of elements of the action which mitigate any potential negative impacts: restricting the activity to beyond three miles from shore (nine miles on the west coast of Florida), conducting on-site surveys for listed species prior to conducting burns, consultation with natural resource specialists to determine site-specific risks to listed species, and limiting use of burning to favorable weather conditions. Sea turtles are most abundant in shallow waters, and the offshore restriction of the activity will make it unlikely to impact sea turtles. The two endangered species of whale likely to be encountered in the area of activity, the humpback and northern right whale, would occur during their winter breeding/calving season and should be easily spotted during a site survey. Listed species are therefore unlikely to be present, or can be avoided, in a burn area.

NMFS does wish to point out, however, that should listed species be present in a burn area, they could be killed or seriously injured by flame. Although it is unknown how a sea turtle might behave if burning oil is present on the sea surface, the sea turtle likely could not sense the fire by temperature sensation or vision from the beneath the surface and might emerge into the flames. Similarly, a surfacing marine mammal might not detect the flames from below or be able to distinguish the burn area from other oil slicks. Since the scope of the current proposed policy makes these interactions unlikely, the incidental take of listed species is not authorized through this informal

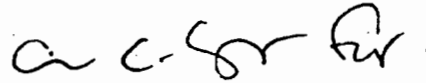


consultation. Should the Coast Guard anticipate using in-situ burning in a broader array of situations, however, NMFS recommends that the Coast Guard seek formal consultation on the issue.

This concludes consultation responsibilities under Section 7 of the ESA. Consultation should be reinitiated, however, if new information reveals impacts of the identified activity that may affect listed species, a new species is listed, new critical habitat is designated, or the activity is subsequently modified.

If you have any questions, please contact  
LTJG David Bernhart, Fishery Biologist, at 813/570-5312.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "A. J. Kemmerer".

Andrew J. Kemmerer  
Regional Director

cc: F/PR2

# ***Use of In-Situ Burning in RRT Region IV***

**Prepared for**

**Region IV Regional Response Team  
Response and Technology Committee  
In-Situ Burn Workgroup**



## Region IV Regional Response Team

From: Region IV Regional Response Team  
To: Distribution  
Subject: LETTER OF PROMULGATION

1. The Region IV Regional Response Team (RRT IV) has approved the attached policy for in-situ burning (ISB) of oil in ocean and coastal waters throughout the RRT IV area of responsibility effective as of this date. This policy hereby replaces any other policies, guidelines or plans now in force throughout the RRT IV area. This policy will be used in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).
2. This policy may become part of the local Area Contingency Plans (ACP) maintained by the U.S. Coast Guard Marine Safety Offices throughout RRT IV.
3. This policy shall be followed as closely as possible, but has not provided for every possible contingency that might occur. Deviations from this policy are authorized when necessary in the best interest of safety or protection of resources. The RRT IV must be made aware of any deviation as soon as possible.
4. This policy cannot be changed or altered without notice and opportunity for comment provided to each signatory official or designated representative to the RRT IV.
5. Any signatory official or designated representative to the RRT IV can petition the RRT IV to amend or revise the policy and/or withdraw approval at any time.
6. All comments and requests for revision shall be directed to the RRT IV Response and Technology Committee for consideration by the RRT IV.
7. The RRT IV Response and Technology Committee will remain abreast of developments and changes for in-situ burning which may provide cause for recommending revision to this policy. Additionally, the Response and Technology Committee may be tasked at any time by members of the RRT IV to provide additional information or guidelines pertaining to the utilization of in-situ burning if available.
8. This Letter of Promulgation remains in effect until canceled by a competent authority.

DATE of EFFECT: 20 Apr 95

U.S. Environmental Protection Agency RRT IV Co-Chair:

//s//  
Mr. Myron D. Lair

U.S. Coast Guard RRT IV Co-Chair:

//s//  
Captain Gerald Abrams

Encl: (1) RRT IV In-situ Burn Policy

## Region IV Regional Response Team Ocean, Coastal, and Inland Waters In-situ Burn Policy

## RECORD OF CHANGES

[illegible]

## **DISTRIBUTION LIST**

Copies of this policy and subsequent changes will be distributed as follows:  
(one copy to each of the listed recipients)

### **COAST GUARD**

Commandant (G-MOR)  
LANTAREA COMCEN  
National Strike Force Coordination Center  
Atlantic Strike Team  
Gulf Strike Team  
CGD Seven (m)  
CGD Seven (cc)  
CGD Eight (m)  
CGD Five (Am)  
MSO Wilmington  
MSO Charleston  
MSO Savannah  
MSO Jacksonville  
MSO Tampa  
MSO Miami  
MSO Mobile

### **FEDERAL AGENCIES**

U.S. EPA Region IV  
U.S. Department of the Interior Region IV  
U.S. Department of Commerce Region IV  
U.S. Fish and Wildlife Service Region IV  
National Marine Fisheries Service Region IV  
NOAA National Marine Sanctuaries, Florida Keys National Marine Sanctuary  
NOAA National Marine Sanctuaries, Grays Reef National Marine Sanctuary  
NOAA HAZMAT Reference Library Seattle, Washington  
NOAA Biological Assessment Team, Seattle, Washington  
NOAA HAZMAT USCG Commandant (G-MEP)  
NOAA Scientific Support Coordinator, CGD Seven

### **STATE AND LOCAL AGENCIES**

State of North Carolina, RRT IV representative  
State of South Carolina, RRT IV representative  
State of Georgia, RRT IV representative  
State of Florida, RRT IV representative  
State of Alabama, RRT IV representative  
State of Mississippi, RRT IV representative

### **NON-GOVERNMENT AGENCIES**

Marine Spill Response Corporation, SE region  
Clean Caribbean Corporation  
Chevron Oil  
Shell Oil

If you would like to be added to this distribution list please contact the Region IV Regional Response Team Response and Technology Chairperson or your agency representative to the regional response team.

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- Zone “B”: Areas Requiring Case-by-Case Approval
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- North Carolina
- South Carolina
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- Florida
- Alabama
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- Federal Trustees

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- United States Fish and Wildlife Service

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**REGION IV  
REGIONAL RESPONSE TEAM  
POLICY FOR  
USE OF IN-SITU BURNING  
IN OCEAN, COASTAL, AND INLAND WATERS**

**INTRODUCTION**

This is the Region IV Regional Response Team (RRT IV) in-situ burn policy for ocean and coastal waters. It is structured as five sections. Section I defines the purpose, authority and scope of the policy. Section II describes the established ocean and coastal water zones for pre-authorized and conditional in-situ burning. Section III contains protocols for conducting in-situ burning, applicable to all open water burns throughout the RRT IV region. Section IV is a signature page where the RRT IV members representing the United States Coast Guard (USCG), the United States Environmental Protection Agency (EPA), the United States Department of the Interior (DOI), the United States Department of Commerce (DOC), and the coastal states within the RRT IV region have by signature agreed to accept this policy for their respective agency or state. Section V contains appendices and includes:

- A regional map showing pre-authorized burn zones.
- Separate Letters of Agreement for the coastal states within region IV for which this policy covers, which establish specific conditions for conducting any in-situ burning inside state waters and for special federally managed areas if applicable.
- Biological assessments and letters pertaining to section 7 consultations with the National Marine Fisheries Service (NMFS) and the United States Fish and Wildlife Service (USFW) for protection of endangered species during in-situ burning operations.
- The intent of RRT IV to adopt the current monitoring program for in-situ burn operations in the RRT IV region which is supported by the U.S. Coast Guard National Strike Force.
- In-situ burn equipment lists.
- Decision tree and application/checklist form.
- Guidance covering the conditional use of in-situ burning in response to oil discharges occurring on inland waters and lands within the jurisdiction of RRT 4. This guidance includes protocols under which the federal On-Scene Commander (OSC) in the Inland Zone may be granted authorization for using ISB.

## **SECTION I**

### **Purpose**

The purpose of this Agreement is to provide concurrence of the USCG, EPA, DOC, DOI, and State representatives to the Region IV Regional Response Team for the pre-authorized use of in-situ burning in response to oil discharges occurring in ocean and coastal waters within the jurisdiction of the RRT IV.

RRT IV recognizes that in some instances the physical collection and removal of oil is infeasible or inadequate, and the effective use of in-situ burning as an oil spill response technique must be considered. Pre-authorization within the set guidelines of this agreement allows the On-Scene Coordinator (OSC) to employ in-situ burning to: (1) prevent or substantially reduce a hazard to human life, (2) minimize the environmental impact of the spilled oil or, (3) reduce or eliminate economic or aesthetic losses which would otherwise presumably occur without the use of this technique.

### **Authority**

Subpart J of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) provides that the OSC; with the concurrence of the EPA representative to the RRT IV, and with the concurrence of the State(s) with jurisdiction over affected waters, and in consultation with the DOC and DOI trustee representatives to the RRT IV; may authorize the use of in-situ burning on oil spills. Pre-authorization of in-situ burning may be adopted with concurrence from all of the above mentioned RRT IV representatives.

Commandant, U.S. Coast Guard, has pre-designated the USCG Captains of the Port as On-Scene Coordinators for coastal oil spills; and has delegated authority and responsibility for compliance with Section 1321 of the Clean Water Act, as amended, to them. The EPA has delegated its authority for authorization of in-situ burning to the EPA representative to the Regional Response Team. RRT IV representatives from the DOC, DOI, and the states of North Carolina, South Carolina, Georgia, Florida, Alabama, and Mississippi have been delegated authority by their respective agencies or state governments to represent natural resource trustee concerns and to serve as consultants to the OSC on these matters.

### **Scope**

The USCG, EPA, DOI, DOC, and the coastal states of RRT IV have adopted in-situ burning as an approved tool to remove spilled or discharged oil from ocean and coastal waters within the jurisdiction of RRT IV. This agreement covers protocols under which in-situ burning is pre-authorized for use by the USCG OSC on state and federal coastal and ocean waters. This document also contains decision-making guidance and RRT IV authorization procedures for the potential use of in-situ burning on inland waters and land areas under the jurisdiction of the RRT IV.

## **SECTION II**

### **Pre-authorization of In-situ Burning**

The term "in-situ burning" applies to operations conducted for removal of oil by burning. These operations may apply during daylight or nighttime hours. In-situ burning operations will be conducted within the jurisdiction of the RRT IV region in accordance with this agreement and, in addition, where applicable, in accordance with protocols established in Letters of Agreement (LOA) between the USCG, EPA, DOI, DOC, and the affected state(s). The authority to authorize the use of in-situ burning provided under this Agreement to the USCG OSC may not be delegated. The following three zones have been established to specify pre-authorized locations and conditions under which burning may occur:

#### **1) "A" ZONES -- PRE-AUTHORIZATION FOR OPEN-WATER BURNING**

The "A" zone is defined as any area in Region IV, falling exclusively under federal jurisdiction; and not classified as a "B", or "R" zone; which is at least 3 miles seaward from any state coastline; and seaward of any state waters, or as designated by separate LOAs with each individual state, the USCG, EPA, DOI, and DOC. In the event that state jurisdiction extends beyond 3 miles from a state shoreline, pre-approval for the "A" zone applies only to those areas outside state jurisdiction unless a LOA is in place and specifically pre-authorizes in-situ burning within those state waters.

Within "A" zones, the USCG, EPA, DOC, DOI, and the state(s) agree that the decision to use in-situ burning rests solely with the pre-designated USCG OSC, and that no further approval, concurrence or consultation on the part of the USCG or the USCG OSC with EPA, DOC, DOI, or the state(s) is required.

The USCG agrees with EPA, DOC, DOI, and the state(s) that the USCG will immediately notify said agencies and affected state(s) of a decision to conduct burning within the "A" zone, via RRT IV representatives.

#### **2) "B" ZONES -- WATERS REQUIRING CASE-BY-CASE APPROVAL**

A "B" zone is defined as any area in the RRT IV region falling under state or special management jurisdiction which is not classified as an "A", or "R" zone.

"B" zones are all areas falling: 1) anywhere within state waters, 2) waters less than 30 feet in depth that contain living reefs, 3) waters designated as a marine reserve, National Marine Sanctuary, National or State Wildlife Refuge, unit of the National Park Service, proposed or designated Critical Habitats, and 4) mangrove areas, or coastal wetlands. Coastal wetlands include submerged algal beds and submerged seagrass beds.

Where a LOA is in effect between the USCG, EPA, DOI, DOC, and the affected state(s); the policy for pre-authorization established under the provisions of said LOA shall preempt the policy herein established for zones otherwise designated as falling in the "B" zone. Established LOAs are provided in Appendix II of this document. In the event that a Letter of Agreement is not in effect for areas falling within the "B" zone, the following protocols shall apply:

- a) If the OSC feels that in-situ burning should be used in areas falling in a "B" zone, a request for authorization must be submitted to the RRT and the affected state(s), along with the required information listed in the in-situ burning Application\Checklist form, found in Appendix VI.
- b) The OSC's decision to use in-situ burning shall be made after consulting with RRT IV representatives of state and federal trustee agencies to ensure that the best available information pertaining to the presence or absence of natural resources at the burn site is obtained.
- c) The OSC is only granted authority to conduct in-situ burning in the "B" zone when consent has been given by EPA and the affected state(s) and after consultation with, DOI and DOC.
- d) The RRT IV will respond to the OSC's request for authorization to burn in zone "B" within four hours from time of notification. If the RRT IV has not responded to a request for authorization to burn in zone "B" within four hours, then the OSC may proceed with in-situ burn operations.

The USCG agrees with EPA, DOC, DOI, and the state(s) that the USCG will immediately notify said agencies and affected state(s) of a decision to initiate an approved burn within a "B" zone via RRT IV representatives.

**Note - Special Case for West Coast of Florida:**

Florida state waters extend seaward into the Gulf of Mexico to a distance of nine miles whereas all other state coastal waters in RRT IV, including Florida's east coast, extend seaward to a distance of three miles. Since Florida state law prohibits pre-authorization of in-situ burning within state waters, an emergency order has been drafted by the state which will allow for rapid case by case approval of in-situ burning in state waters when necessary and judged to be appropriate by a designated state official (App. II). No case by case approval will be required or considered necessary from EPA, DOI, or DOC for waters extending seaward in excess of three miles on Florida's west coast unless otherwise designated as meeting the criteria for a case by case zone.

**3) "R" ZONES -- EXCLUSION ZONES**

An "R" zone is defined as any area in the RRT IV region falling under state or special management jurisdiction which is not classified as an "A" or "B" zone.

The "R" zone is that area designated by the RRT IV as an exclusion zone. No in-situ burning operations will be conducted in the "R" zone unless 1) in-situ burning is necessary to prevent or mitigate a risk to human health and safety; and/or 2) an emergency modification of this agreement is made on an incident-specific basis.

RRT IV currently has not designated any areas as "R" zones, but retains the right to include areas for exclusion at a future point in time if it feels this is warranted.



## SECTION III

### Protocols

The following requirements apply to the use of all burning operations under the provisions of this policy:

1. **Health and Safety Concerns -- Operators:** Assuring workers' health and safety is the responsibility of employers and the USCG OSC who must comply with all Occupational Health and Safety Administration (OSHA) regulations. Prior to any in-situ burn operations, a site safety plan must be submitted and approved by the OSC. Public: The burning should be stopped if it is determined that it becomes an unacceptable health hazard due to operational or smoke exposure concerns to responders or the general public. If at any time, exposure limits are expected to exceed national federal air quality standards in nearby populated areas, as a result of in-situ burning operations, then in-situ burning operations will immediately cease. The Level of Concern (LOC) for particulates for the general public in the RRT IV region is 150 ug/m<sup>3</sup> (PM-10) averaged over 1 hour.
2. Monitors representing the USCG, EPA, federal trustee agencies, the affected state(s), OSHA, and the responsible party will have the opportunity to observe in-situ burning operations. Monitoring to establish "Continue/Discontinue" data for input to the OSC will be conducted in accordance with protocols established by the Region IV Regional Response Team and as outlined in the monitoring program contained in appendix VI. Unless smoke plumes are predicted to cross over populated or environmentally sensitive areas, an inability to conduct monitoring operations will not be automatic grounds for discontinuing or prohibiting in-situ burn operations. All burns must incorporate visual monitoring at the burn site to record the disposition of burn residues and to monitor the burn site for potential impact to any natural resource in the area. Samples of the residue will be collected if feasible.
3. Prior to any in-situ burning operations, the OSC will apply the decision tree contained in Appendix VI.
4. The Application Checklist form in Appendix VI shall be completed for all burns and provided to RRT IV members in a timely manner for documentation and informational purposes.
5. The USCG will make every reasonable effort to continuously evaluate the decision to burn, and allow RRT agencies and affected state(s) the opportunity to comment. Formal requests to discontinue a burn should be presented, in writing, to the OSC for consideration.
6. Burning will be conducted in a way that allows for effective control of the burn, to the maximum extent feasible, including the ability to rapidly stop the burn if necessary. Contained and controlled burning is recognized as the preferred method of burning using fire-resistant boom. All practical efforts will be made to control and contain the burn and prevent accidental ignition of the source. Generally it is not recommended that the source or adjacent uncontained slicks be allowed to ignite during in-situ burning operations. Certain circumstances, however, may warrant consideration of carefully planned source ignition.
7. Mechanical recovery equipment shall be mobilized on-scene, when feasible, for backup and complimentary response capability. Provisions must be made for collection of burn residue following the burn(s).

8. In-situ burning will be conducted in accordance with any consultations approved by the USFWS and the NMFS, under Section 7 of the Endangered Species Act. Prior to beginning an in-situ burn, an on-site survey will be conducted to determine if any threatened or endangered species are present in the burn area or otherwise at risk from any burn operations, fire, or smoke. Appropriate natural resource specialists, knowledgeable with any special resource concern in the area and representing the resource trustee, will be consulted prior to conducting any in-situ burn. Measures will be taken to prevent risk of injury to any wildlife, especially endangered or threatened species. Examples of potential protection measures may include: moving the location of the burn to an area where listed species are not present; temporary employment of hazing techniques, if effective; and physical removal of individuals of listed species only under the authority of the trustee agency.
9. In-situ burning is advised only when the meteorological and sea conditions are operationally favorable for a successful burn. The OSC will give due consideration to the direction of the wind, and the possibility of the wind blowing precipitate over population centers or sensitive resources onshore. A safety margin of 45 degrees of arc on either side of predicted wind vectors should be considered for shifts in wind direction.
10. Any use of in-situ burning requires that a post-incident report be provided by the OSC, or a designated member of the OSC's staff, within 45 days of in-situ burning operations. Recommendations for changes or modification to this policy should be presented in the report, if appropriate. This report will be presented at a Region IV RRT meeting, if requested by the RRT.

## SECTION IV

### Signature Page

We hereby attest and declare that by our signature we do approve this policy for in-situ burning as presented herein for the agency or government we represent on the Region IV Regional Response Team (RRT IV).

<u>                    //s//                    </u>	<u>                    4/20/95                    </u>
Captain Gerald Abrams	DATE
United States Coast Guard	
RRT IV Co-chair	

<u>                    //s//                    </u>	<u>                    4/20/95                    </u>
Mr. Myron D. Lair	DATE
United States Environmental Protection Agency	
RRT IV Co-chair	

<u>                    //s//                    </u>	<u>                    4/20/95                    </u>
Mr. James H. Lee	DATE
U.S. Department of the Interior	
RRT IV Member	

<u>                    //s//                    </u>	<u>                    4/20/95                    </u>
Mr. John Lindsay	DATE
U.S. Department of Commerce	
RRT IV Member	

<u>                    //s//                    </u>	<u>                    4/20/95                    </u>
Mr. Douglas C. White	DATE
State of Florida	
RRT IV Member	

<u>                    //s//                    </u>	<u>                    6/19/95                    </u>
Mr. R. Lewis Shaw	DATE
Deputy Commissioner	
Environmental Quality Control	
Department of Health and Environmental Control	
State of South Carolina	

//s//  
Mr. Robert J. Rogers, Chief  
State of Mississippi  
RRT IV Member

6/23/95  
DATE

//s//  
Mr. E. John Williford  
State of Alabama  
RRT IV Member

4/20/95  
DATE

//s//  
Ms. Linda Forehand  
State of North Carolina  
RRT IV Member

4/20/95  
DATE

Dr. Albert K. Langley  
State of Georgia  
Environmental Protection Division  
Department of Natural Resources  
Region IV RRT Member

7/10/95  
DATE

## **SECTION V**

### **Appendices**

- I     Zone Map**
- II    Letters of Agreement**
- III   Section 7 Consultations for Endangered Species**
- IV   In-Situ Burn Monitoring Plan**
- V     Equipment Lists**
- VI   Decision Tree, Application/Checklist**
- VII In-Situ Burning in the Inland Zone Protocol**

# Appendix I

## Zone Maps

## **Appendix II**

# **Letters of Agreement**

- **North Carolina**
- **South Carolina**
- **Georgia**
- **Florida**
- **Alabama**
- **Mississippi**
- **Kentucky**
- **Tennessee**
- **Federal Trustees**

**- Gray's Reef National Marine Sanctuary**

# North Carolina



## **NORTH CAROLINA**

**OFFICE:** North Carolina Department of Environment, Health and Natural Resources  
Division of Environmental Management  
P.O. Box 29535  
Raleigh, NC 27626-9535

### **REQUESTS FROM THE FEDERAL ON-SCENE COORDINATOR TO USE IN-SITU BURNING SHALL BE DIRECTED TO:**

(919) 733-5291	(7:30AM – 5:00PM)
(919) 899-4500	(After hours pager)

### **PROCEDURES:**

DEM personnel will obtain the necessary input from the Air and Water Quality Sections, Emergency Management, Marine Fisheries, U.S. Coast Guard. Etc. and then notify the Federal OSC of the State's decision.

### **INFORMATION TO BE PROVIDED BY THE FEDERAL OSC/RESPONSIBLE PARTY:**

Completion of the checklist contained in Section IV of this plan will be accepted as meeting the State's information requirement.

**TIME NEEDED TO REACH A DECISION:** Minimum of four hours.

**A DECISION WILL BE MADE OM A CASE-BY-CASE BASIS.**

## South Carolina

**LETTER OF AGREEMENT  
ON LIMITED USE OF IN-SITU BURNING  
DURING OIL DISCHARGES OCCURRING IN COASTAL WATERS  
AMONG U.S. COAST GUARD -- SEVENTH DISTRICT,  
U.S. ENVIRONMENTAL PROTECTION AGENCY -- REGION IV,  
U.S. DEPARTMENT OF THE INTERIOR,  
U.S. DEPARTMENT OF COMMERCE,  
AND THE STATE OF SOUTH CAROLINA**

**I. PURPOSE**

The U. S. Environmental Protection Agency (EPA), U. S. Department of Commerce (DOC), U. S. Department of the Interior (DOI), the U. S. Coast Guard (USCG), and the State of South Carolina recognize that, while mechanical removal is the preferred method of dealing with oil discharges into the waters of the State of South Carolina, in certain instances the physical containment, collection, and removal of the oil may not be possible, and the effective use of in-situ burning must be considered to prevent a substantial threat to public health or welfare, or to minimize serious environmental and/or economic damages. Accordingly, above said agencies hereby grant the USCG On-Scene Coordinator (OSC) approval to authorize in-situ burning of oil spills on the waters of the State of South Carolina, within the following parameters.

**II. AUTHORITY**

Subpart J of the National Oil and Hazardous Substances Contingency Plan (NCP) provides that the USCG OSC, with the concurrence of the EPA, the affected State(s), DOI, and DOC may pre-authorize the use of in-situ burning agents on oil discharges.

Commandant, U. S. Coast Guard has designated the USCG Captain of the Port as the OSC for oil discharges in the coastal zone. The USCG OSC has pre-approval to use in-situ burning on oil discharges as defined in the NCP, when it is necessary to prevent substantial threat to public health or welfare. The authority to use in-situ burning on oil discharges in accordance with this agreement is vested solely in the individual who is the pre-designated USCG OSC and may not be delegated.

As stated in the NCP, EPA notes that the state representative to the RRT, the body which has the responsibility for pre-approval for specific countermeasures, represents all the interests of the State and is the conduit for State concurrence. Also as stated in the NCP, under section 300.115, local governments are represented directly on the RRT by the State, and local input is coordinated through the State's representative.

**III. PROVISIONS**

- 1) The minimum requirements for conducting burns in federal waters in Region IV, as delineated in the Region IV in-situ burning policy and specifically, the protocols listed in section III of that policy, must be applied, in addition to any provisions set forth below.
- 2) If a decision has been made to conduct in-situ burning within South Carolina waters, under the provisions of this agreement, the USCG OSC will immediately notify the RRTIV representative to the State of South Carolina and EPA, DOI, and DOC through their representatives to the RRTIV. This notification will include at a minimum:
  - a. Date, Time and Location of the incident;
  - b. Type and amount of oil discharged;
  - c. Area affected;

- d. The projected area of impact of the oil if not burned;
- e. Reasons why mechanical or physical removal of the oil is not feasible, or will not provide the optimal response method.
- f. Burning method to be used.
- g. On-scene weather, wind, and forecasted weather.

3) Any official request by a Trustee representative, of any of the above agencies to discontinue in-situ burning operations, submitted to the OSC in writing, will be grounds for immediate cessation of in-situ burning operations.

4) Monitoring of in-situ burning operations shall be performed in accordance with stated RRTIV policy.

#### **IV. AREA OF DESIGNATED PRE-APPROVAL IN SOUTH CAROLINA STATE WATERS**

The predesignated USCG OSC is granted authorization to allow in-situ burning in the waters of the State of South Carolina according to the following guidelines. No further approval from the State, the EPA, DOI, DOC, or other agencies is required to conduct burning operations within these pre-approved areas subject to the following conditions:

Burning shall not be conducted in, on, or over waters containing reefs; waters designated as marine reserves; in a National marine Sanctuary, National or State Wildlife Refuge, in proposed or designated Critical Habitat; units of the National Park Service; in mangrove areas; or in waters in coastal wetlands; except with the prior and express concurrence of the State of South Carolina, EPA, DOI, and DOC. Coastal wetlands include: submerged algal beds and submerged seagrass beds.

Burning shall not be conducted in harbors, bays, rivers, lakes and other inland waters except with the prior and express concurrence of the State of South Carolina, the EPA, DOI, and DOC.

Burning shall not be conducted in State waters from the coastline out 3 miles unless prevailing wind direction is decidedly seaward and is expected to remain in the seaward direction throughout the duration of the in-situ burning operations. Without favorable winds, the prior and express concurrence of the State of South Carolina, the EPA, DOI, and DOC must be obtained.

#### **V. AMENDMENTS**

This Letter of Agreement (LOA) may be amended in whole or in part as is mutually agreeable to all parties thereto by petition in writing.

#### **VI. CANCELLATION**

This letter may be canceled in whole or in part by any of the participating agencies. Cancellation will take place 30 days following delivery of written notification to each of the agencies participating in this LOA.

\_\_\_\_\_  
//s//  
Captain Gerald Abrams  
Seventh Coast Guard District  
Region IV RRT co-chair

\_\_\_\_\_  
7/8/95  
DATE

\_\_\_\_\_  
//s//  
Mr. Myron D. Lair  
U. S. Environmental Protection Agency  
Region IV RRT co-chair

\_\_\_\_\_  
8/10/95  
DATE

Mr. James Lee  
U. S. Department of the Interior  
Region IV RRT member

DATE \_\_\_\_\_

Mr. John Lindsay  
U. S. Department of Commerce  
Region IV RRT member

DATE \_\_\_\_\_

Mr. R. Lewis Shaw  
Deputy Commissioner  
Environmental Quality Control  
Department of Health and Environmental Control  
State of South Carolina

DATE \_\_\_\_\_

# Georgia

**LETTER OF AGREEMENT  
ON LIMITED USE OF IN-SITU BURNING  
DURING OIL DISCHARGES OCCURRING IN COASTAL WATERS  
AMONG U.S. COAST GUARD -- SEVENTH DISTRICT,  
U.S. ENVIRONMENTAL PROTECTION AGENCY -- REGION IV,  
U.S. DEPARTMENT OF THE INTERIOR,  
U.S. DEPARTMENT OF COMMERCE,  
AND THE STATE OF GEORGIA**

I. The U. S. Environmental Protection Agency (EPA), U. S. Department of Commerce (DOC), U. S. Department of the Interior (DOI), the U. S. Coast Guard (USCG), and the State of South Carolina recognize that, while mechanical removal is the preferred method of dealing with oil discharges into the waters of the State of South Carolina, in certain instances the physical containment, collection, and removal of the oil may not be possible, and the effective use of in-situ burning must be considered to prevent a substantial threat to public health or welfare, or to minimize serious environmental and/or economic damages. Accordingly, above said agencies hereby grant the USCG On-Scene Coordinator (OSC) approval to authorize in-situ burning of oil spills on the waters of the State of Georgia, within the following parameters.

II. Subpart J of the National Oil and Hazardous Substances Contingency Plan (NCP) provides that the USCG OSC, with the concurrence of the EPA, the affected State(s), DOI, and DOC may pre-authorize the use of in-situ burning agents on oil discharges.

Commandant, U. S. Coast Guard has designated the USCG Captain of the Port as the OSC for oil discharges in the coastal zone. The USCG OSC has pre-approval to use in-situ burning on oil discharges as defined in the NCP, when it is necessary to prevent substantial threat to public health or welfare. The authority to use in-situ burning on oil discharges in accordance with this agreement is vested solely in the individual who is the pre-designated USCG OSC and may not be delegated.

As stated in the NCP, EPA notes that the state representative to the RRT, the body which has the responsibility for pre-approval for specific countermeasures, represents all the interests of the State and is the conduit for State concurrence. Also as stated in the NCP, under section 300.115, local governments are represented directly on the RRT by the State, and local input is coordinated through the State's representative.

### **III. PROVISIONS**

1) The minimum requirements for conducting burns in federal waters in Region IV, as delineated in the Region IV in-situ burning policy and specifically, the protocols listed in section III of that policy, must be applied, in addition to any provisions set forth below.

2) If a decision has been made to conduct in-situ burning within Georgia waters, under the provisions of this agreement, the USCG OSC will immediately notify the RRTIV representative to the State of Georgia and EPA, DOI, and DOC through their representatives to the RRT IV. This notification will include at a minimum:

- a. Date, Time and Location of the incident;
- b. Type and amount of oil discharged;
- c. Area affected and trajectory of oil (preliminary);
- d. On-Scene weather and weather forecasted over the next 48 hours;
- e. Reasons why mechanical or physical removal of the oil is not feasible, or will not provide the optimal response method.

- f. Reasons why dispersant application is not feasible, or will not provide the optimal response method.

3) Any official request by any of the above mentioned RRT IV agencies to discontinue in-situ burning operations, submitted to the OSC in writing, will be grounds for immediate cessation of in-situ burning operations.

4) Monitoring of in-situ burning operations shall be performed in accordance with stated RRTIV policy.

#### **IV. AREA OF DESIGNATED PRE-APPROVAL IN GEORGIA STATE WATERS**

The pre-designated USCG OSC is granted authorization to allow in-situ burning in the waters of the State of Georgia according to the following guidelines. No further approval from the State, the EPA, DOI, DOC, or other agencies is required to conduct burning operations within these pre-approved areas subject to the following conditions:

Burning shall not be conducted in, on, or over waters containing reefs; waters designated as marine reserves; in a National marine Sanctuary, National or State Wildlife Refuge, in proposed or designated Critical Habitat; units of the National Park Service; in mangrove areas; or in waters in coastal wetlands; except with the prior and express concurrence of the State of South Carolina, EPA, DOI, and DOC. Coastal wetlands include: submerged algal beds and submerged seagrass beds.

Burning shall not be conducted in harbors, bays, rivers, lakes and other inland waters.

Burning shall not be conducted in State waters from the coastline out 3 (three) miles unless prevailing wind direction is decidedly seaward from the surface to 500 mb and is expected to remain in the seaward direction throughout the duration of the in-situ burning operations.

Burning shall not be conducted within 1/2 mile of the coastline under any circumstances.

Burning shall not be conducted within 1 hour of sunrise or sunset.

#### **V. AMENDMENTS**

This Letter of Agreement (LOA) may be amended in whole or in part as is mutually agreeable to all parties thereto by petition in writing.

#### **VI. CANCELLATION**

This letter may be canceled in whole or in part by any of the participating agencies. Cancellation will take place 30 days following delivery of written notification to each of the agencies participating in this LOA.

\_\_\_\_\_  
//s//  
Captain Gerald Abrams  
Seventh Coast Guard District  
Region IV RRT co-chair

\_\_\_\_\_  
8/15/95  
DATE

\_\_\_\_\_  
//s//  
Mr. Myron D. Lair  
U. S. Environmental Protection Agency  
Region IV RRT co-chair

\_\_\_\_\_  
8/10/95  
DATE



//s//

Mr. James Lee  
U. S. Department of the Interior  
Region IV RRT member

8/10/95

DATE

//s//

Mr. John Lindsay  
U. S. Department of Commerce  
Region IV RRT member

8/10/95

DATE

//s//

Dr. Albert K. Langley  
State of Georgia  
Environmental Protection Division  
Department of Natural Resources  
Region IV RRT Member

8/2/95

DATE

## Florida

**STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**EMERGENCY ORDER  
TO ALLOW IN SITU BURNING OF DISCHARGED OIL**

Pursuant to the authority of Chapter 403.061(8) and (28), Florida Statutes, the Secretary is authorized to issue orders as are necessary to control pollution and perform any other act necessary to control pollution.

**FINDINGS OF FACT**

1. Oil discharged from vessels, on the salt waters of the state is detrimental to marine resources and could endanger the health, safety, and welfare of the people of the State of Florida.
2. In situ burning of discharged oil reduces the detrimental environmental impact of discharged oil on marine resources and on the health, safety, and welfare of the people of the State of Florida.
3. Oil discharged onto the salt waters of the state poses a threat to air quality through evaporation alone. Additionally, the mechanical cleanup of discharged oil generates large amounts of waste which must be disposed of in landfills and by incineration.
4. Oil has been discharged onto salt waters of the state at the coordinates of:  

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5. The discharged oil will be burned in situ on salt waters of the state at the coordinates of:  

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6. The discharged oil is at least 1 to 2 mm thick on the water and will support in situ burning.
7. Wind speed is 20 knots or less at the site of the in situ burn.
8. Wave height is three feet or less at the site of the in situ burn.
9. The oil is gathered by and contained in a fire-resistant boom prior to igniting.
10. The location of the in situ burn is a minimum of (miles/yards) from shore.
11. Mechanical recovery equipment shall be mobilized on scene, when feasible, as a backup capability should in situ burning prove ineffective and to collect burn residue.
12. A Department representative is on-site to observe the application techniques and results.
13. The in situ burning is conducted by trained professionals using recognized techniques and technology.
14. Burning is not permitted if the prevailing winds will carry significant smoke plumes over inhabited areas. Burning shall be conducted in a way that allows for controlling the burn in the event of wind shifts.
15. The National Oceanographic and Atmospheric Administration (NOAA) will be consulted to assure that meteorological conditions during the in situ burn of discharged oil are such that the effects to the public health and safety and the environment from the burning are minimized.

### CONCLUSIONS OF LAW

1. The Secretary has the authority to issue emergency orders pursuant to Chapter 403.061(8), F.S. and Chapter 120.59(3), F.S.
2. Oil discharged from vessels on the salt waters of the state is environmentally detrimental to marine resources and could endanger the health, safety, and welfare of the people of the State of Florida.
3. In Situ burning of oil discharged onto salt waters of the state is authorized notwithstanding the prohibitions in Rule Chapter 62-256, F.A.C.

### ORDER

In Situ burning of oil discharged onto salt waters of the State is authorized at (coordinates) \_\_\_\_\_ beginning on (date) \_\_\_\_\_ at (time) \_\_\_\_\_ and to be concluded by (date) \_\_\_\_\_ at (time ) \_\_\_\_\_ subject to the restrictions and findings of fact in this ORDER.

In situ burning of oil discharged onto salt waters of the State will be conducted only under conditions, including meteorological, which minimize any detrimental environmental effects of the discharged oil and its burning on marine resources and upon the health, safety, and welfare of the people of the State of Florida.

ORDERED this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

\_\_\_\_\_  
DIRECTOR  
DIVISION OF LAW ENFORCEMENT

(address)

# Alabama

No LOA or special agreement is in place for Alabama at this time.

# Mississippi

No LOA or special agreement is in place for Mississippi at this time.



# Kentucky

No LOA or special agreement is in place for Kentucky at this time.

# Tennessee

No LOA or special agreement is in place for Tennessee at this time.

## Federal Trustees

## **Appendix III**

# **Memoranda of Understanding for Protection of Endangered Species**

- **National Marine Fisheries Service**
- **United States Fish and Wildlife Service**

# **National Marine Fisheries Service**

Commander  
Seventh Coast Guard District

Brickell Plaza  
Federal Building  
909 SE First Avenue  
Miami, Florida 33131-3050  
Staff Symbol: (m)  
Phone: (305) 536-5651

16465  
3 Feb 95

Mr. Charles Oravetz  
Protected Species Management Branch  
National Marine Fisheries Service  
9721 Executive Center Drive North  
St. Petersburg, Florida 33702

Dear Mr. Oravetz:

I am writing to request your review of and concurrence on a biological assessment conducted pursuant to Section 7 of the Endangered Species Act. Lieutenant Commander Bradford Benggio, the National Oceanographic and Atmospheric Administration (NOAA) Scientific Support Coordinator for the United States Coast Guard Seventh District, has discussed this matter with Mr. Jeff Brown of your staff. Additionally, he has consulted with Mr. Waynon Johnson, the designated NOAA trustee representative to the Regional Response Teams in Federal Region IV and the Caribbean.

The U. S. Coast Guard, along with the Environmental Protection Agency, the Department of the Interior, the Department of Commerce, and the States of North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, and the Commonwealth of Puerto Rico, and Territories of the U.S. Virgin Islands plan to execute policy that will provide the Federal On-Scene Coordinators within Federal Region IV and the Caribbean pre-authorization to use in-situ burning within designated zones as a response countermeasure for oil spills. It is the understanding of the Federal Agencies involved that this may constitute federal action in an area where endangered and threatened species are known to occur. Consequently, consultation may be required under Section 7 of the Endangered Species Act.

This request includes the attached biological assessment in accordance with 50 CFR 402.12. Our biological assessment of this action indicates that the listed species present are not likely to be adversely affected by this action. The use of in-situ burning offers strong potential for net environmental benefit during an oil spill by allowing for increased protection of nearshore, shoreline, and down-current habitat and biological resources. It provides for a more rapid removal of oil from the environment thus subjecting fewer resources to the potential of impact. Therefore, with your concurrence, a formal consultation should not be necessary.

Sincerely,

//s//

Gerald W. Abrams  
Captain, U.S. Coast Guard  
Chief, Marine Safety Division  
Seventh Coast Guard District  
By direction of the District Commander

cc: Mr. Jeff Brown



## **BIOLOGICAL ASSESSMENT**

This biological assessment consists of:

- a description of the area affected by the action;
- a description of the proposed action;
- a description of in-situ burning as an oil spill response technique;
- a description of the listed species present;
- a brief review of the literature on the effects of oil on the listed species of concern;
- an assessment of the risks of in-situ burning to listed species; and
- a brief assessment of alternatives to pre-authorization of in-situ burning in these zones.

### **Description of the Area**

The subject area includes two zones (see zone maps) in U.S. Coast Guard Districts 5, 7, and 8 designated in the regional policy as follows:

Zone A: The "A" zone is defined as any area within Region IV Regional Response Team (RRT IV) or the Caribbean Region Regional Response Team (CRRT) jurisdictions falling exclusively under federal jurisdiction; and not classified as a "B" or "R" zone; which is at least 3 miles seaward from any state coastline; and seaward of any state waters, or as designated by separate Letters of Agreement (LOA) with each individual state or Federal Trustee and the Regional Response Team (RRT).

Zone B: The "B" zone is defined as any area in RRT IV or the CRRT falling under state or special management jurisdiction which is not classified as an "A" or "R" zone. "B" zones are areas falling anywhere within state waters or the following special management or specified areas:

- National Marine Sanctuaries, including the Florida Keys National Marine Sanctuary;
- National or State Wildlife Refuges;
- Units of the National Park System;
- Waters designated as Marine Reserves;
- Proposed or designated Critical Habitats;
- Special endangered species use areas designated by Trustee Agency representatives;
- Waters less than 30 feet in depth that contain living coral reefs, submerged algal beds, submerged seagrass beds, and coastal wetlands including mangroves areas, saltwater marshes, salt ponds, and freshwater marshes.

Zone R: Currently no "R" zones have been identified by Region IV or the Caribbean Region. An "R" zone is defined as any area in the RRT IV and CRRT regions falling under state or special management jurisdiction which is not classified as an "A" or "B" zone. The "R" zone is that area designated by the Region IV and Caribbean Region as exclusion zones where no in-situ burn operations will be conducted.

This policy will be implemented regionally for in-situ burning throughout the offshore areas within the boundaries of the Caribbean Regional Response Team and Region IV Regional Response Team jurisdictions.

### **Description of the Proposed Action**

The policy acknowledges that in most cases the primary method for controlling released oil will be physical removal from the environment. Under certain circumstances, however, effective physical removal of oil from the water surface may not be possible or efficient enough to maximize resource protection. In such cases, in-situ burning can significantly reduce impacts to the environment, including listed species. The policy recognizes that the decision to use in-situ burning within the pre-authorization protocols rests solely with the pre-designated Federal On-Scene Coordinator (FOSC) and cannot be further delegated.

The policy provides that the FOSC may conduct in-situ burning without further concurrence within Zone A. Burning can be conducted in Zone A only when the wind is expected to carry smoke away from population centers and other sensitive resources and if PM-10 concentrations, measured according to a monitoring plan which uses real-time particulate counters, do not exceed established human exposure limits. The decision to conduct burning will be guided by a decision tree contained in the policy. This decision tree addresses concerns related to oil type, oil amount, oil condition, environmental conditions, proximity issues, availability of personnel and equipment, and time constraints.

In-Situ burning in Zone B will require case-by-case authorization by the Region IV RRT or Caribbean RRT. In-situ burning will not be pre-authorized in Zone B areas unless designated in separate LOAs developed by the states and agreed upon by the Regional Response Team.

Prior to beginning an in-situ burn, an on-site survey will be conducted, in consultation with natural resource specialists, to determine if any threatened or endangered species are present in the burn area or otherwise at risk from any burn operations, fire, or smoke. Measures will be taken to prevent risk of injury to any wildlife, especially endangered or threatened species. Examples of potential protection measures include: moving the location of the burn to an area where listed species are not present; temporary employment of hazing techniques, if effective; and physical removal of individuals of listed species under the authority of the trustee agency. Burn residues will be collected immediately following an in-situ burn to minimize exposure to wildlife and habitat.

If a decision to use in-situ burning is made, the U.S. Environmental Protection Agency (EPA), the U.S. Department of Commerce (DOC), the U.S. Department of the Interior (DOI), and appropriate state(s) will be notified through RRT representatives as soon as possible. A post-incident briefing will be held within 45 days after an in-situ burn to exchange information on the efficacy and effects of the burn, and to determine whether any changes to the policy are needed.

### **Description of In-Situ Burning**

In-situ burning is an oil spill response technique which, when used under appropriate conditions, quickly and efficiently removes large quantities of oil from the water surface with minimal logistical support. A typical in-situ burn employs boats towing fire resistant boom in a U-shaped configuration, in which oil is collected, towed away from the main slick and ignited. The configuration is slowly towed during the burn in order to maintain the oil toward the back end of the boom at the minimum thickness necessary to sustain the burn. After the boomed oil is burned, the process is repeated. In-situ burning can be used simultaneously with other offshore oil spill response techniques or can be conducted when and where other techniques are insufficient or impossible.

Perhaps the biggest advantage of in-situ burning is that it can achieve a burn efficiency of up to 99 percent of the oil contained in the boom, a substantially higher removal efficiency than is achieved with mechanical removal or dispersants. When conditions are optimal for an effective and safe ignition, burning can eliminate spilled oil at approximately 100 gallons/day/square foot. This elimination rate means that a single 500 foot fire boom positioned in a U-configuration to intercept an ongoing spill could provide enough burn area to sustain an elimination rate of 15,000 barrels per day (Allen and Ferek, 1993, Fingas *et al.*, 1994). A major operational advantage of in-situ burning is the lack of dependence on skimming, transfer, and storage equipment for recovered oil and water.

As with any response technique, effective use of in-situ burning requires a specific set of operational, environmental, and oil slick conditions. Most crude and refined oils will burn on water if the oil layer is at least several millimeters thick (minimum of 2-3 mm), the ignition area sufficiently large, and the temperature high enough to vaporize the oil for continued combustion. Emulsification, evaporation of lighter volatiles, and the thinning of spilled oil layers can significantly reduce the successful use of controlled burning. Consequently, burning at sea is most effective early in a spill response. Due to containment requirements for ignition, relatively calm wind and sea conditions are also necessary.

Typically 97% to 98% of the heat produced during a burn is directed upward and outward so that any heat absorbed by the underlying water is generally negligible. This is particularly true where currents continuously cause an exchange of water below the burning oil. At mesoscale burn tests conducted in the Mobile, Alabama in 1992,

researchers found that temperature did not increase in the static water layer at depths greater than four centimeters below the surface (Shigenaka and Barnea, 1993).

In-situ burning rapidly converts the oil into its primary combustion products, carbon dioxide and water, a small amount of other gases such as CO, NO<sub>2</sub>, and SO<sub>2</sub>, a small percentage of smoke particulates and residue byproducts. The smoke particulates and other products of combustion produce a visible smoke plume. The heat generated by the burning oil in the boom causes the smoke to rise several hundred to several thousand feet and to be carried away by the prevailing winds. Laboratory and field experiments indicate concentrations of the gases and fine particulate matter dissipate to background levels within less than two hundred meters downwind of the burn location. The exact distance depends on several factors, including size of the burn, wind velocity, and plume behavior (Walton, *et al.*, 1993, 1994. Fingus *et al.*, 1994). A small percentage of the original oil volume remains as a taffy-like residue following an in-situ burn. Floating residue can be collected easily with nets and requires relatively small volumes for temporary storage.

Potential aquatic toxicity resulting from in-situ burning has been evaluated in laboratory studies and during the Newfoundland Oil Burn Experiment (NOBE), conducted in 1993. Results of these studies indicate that in-situ burning does not adversely affect the underlying water column beyond those effects already associated with the unburned oil. Lethal and sublethal toxicity and concentrations of petroleum hydrocarbons from the water collected in the vicinity of unburned and burned crude oil slicks in the open sea were extremely low with no significant differences found between water samples collected in both areas (Daykin, *et al.*, 1994). It is important to remember that the surface area affected by in-situ burning is small relative to the total surface area and depth of a given body of water and that any adverse ecological impacts are likely to be confined to a small localized area.

### **Description of Listed Species Present**

#### **Sea Turtles**

Three endangered species of sea turtles (Kemp's (Atlantic) Ridley, Leatherback, and Hawksbill) and three threatened species (Green, Loggerhead, Olive (Pacific) Ridley) occur in the area. Kemp's Ridley (*Lepidochelys kempii*), the most endangered of these species, occurs mainly in coastal areas of the Gulf of Mexico and the northwestern Atlantic Ocean and is a shallow water benthic feeder, preying largely on crabs (Owens *et al.*, 1992). Leatherback turtles (*Dermochelys coriacea*) occur throughout the area and have been reported to nest on beaches in Florida and, to a lesser extent, Georgia and North Carolina. Leatherback nesting in the U.S. Caribbean is reported from the Virgin Islands (St. Croix, St. Thomas, St. John) and Puerto Rico, including Islas Culebra, Vieques, and Mona (Boulon *et al.*, 1992). Leatherbacks are considered to be a highly pelagic species and feed primarily on jellyfish. Hawksbill sea turtles (*Eretmochelys imbricata*) occur in the area and are omnivorous, though they seem to prefer invertebrates. Atlantic Green Sea turtles (*Chelonia mydas*) occur throughout the area and nest along the east coast of Florida and in smaller numbers in the U.S. Virgin Islands and Puerto Rico. They feed on both sea grasses and algae (Ehrhart *et al.*, 1991). Loggerhead turtles (*Caretta caretta*) occur throughout the area and nest primarily along North Carolina, South Carolina, Georgia, and Florida beaches. Loggerheads feed on a wide variety of benthic invertebrates (NMFS, 1991). The Olive Ridley (*Lepidochelys olivacea*) occurs and nests in the Caribbean and is predominantly carnivorous.

#### **Cetaceans**

Endangered cetaceans that occur in the area include four mysticetes (baleen whales): the finback (*Balaenoptera physalus*), humpback (*Megaptera novaeangliae*), right (*Eubaleana glacialis*), and sei (*Balaenoptera borealis*) whales. Right whales are of greatest concern because they are the most severely depleted large whale species and because they feed, primarily on concentrations of zooplankton, by skimming the surface of the water. Right whales occur in the area primarily in winter and calve in the coastal waters of Georgia and northeast Florida (NMFS, 1990). Humpback whales occur in the area most commonly during their winter breeding season and their breeding range includes part of the Caribbean. Humpback whales feed primarily on krill and small schooling fishes. Fin whales winter in the area, primarily in offshore waters and feed on small fishes, pelagic crustaceans, and squids (NMFS, 1989). Sei whales occur in the northern part of the area and feed on surface plankton, krill, small schooling fishes,

and squids. All these baleen whale species are opportunistic feeders and may feed at or near the surface (McKenzie and Nicolas, 1988).

The sperm whale (*Physeter catodon*), an odontocete (toothed whale), is the fifth endangered cetacean species that occurs in the area and is most likely to be found at the edge of the continental shelf or in deep oceanic waters. Sperm whales are deep diving and feed primarily on squids and deep water fishes.

## **Fish**

Only one species of endangered fish, the shortnose sturgeon, occurs in the area. This species is known to occur only in the major river systems and within a few miles of shore, and so is not likely to occur in the area under consideration for action.

## **Effects of Oil Spills on Sea Turtles and Cetaceans**

Sea Turtles can be exposed to spilled oil during feeding, when surfacing to breath, or during nesting in areas contaminated by stranded oil. Turtles are also susceptible to floating tarballs that form from unrecovered, weathered oil. Studies indicate oil exposure can have several adverse effects on turtles, including toxic responses to vapor inhalation or ingestion, skin irritation, interference with osmoregulation and ion balance and reduced hatching success (Van Fleet and Pauly, 1987; Fritts and McGehee, 1982; Lutz and Lutcavage, 1989). Though oil exposure may not directly kill turtles, the effects may make them more vulnerable to predation or disease. Additionally, response activities to clean-up oil stranded on nesting beaches can pose an additional risk of injury during nesting activity.

Whales are subject to several risks when exposed to spilled oil. The most serious risk appears to be inhalation of toxic vapors, which can cause inflammation of mucous membranes of the eyes and airways, lung congestion, or even pneumonia. Effects from contact or ingestion are generally temporary and of less concern (Geraci and St. Aubin, 1990). The volatile fraction of crude oil (approximately one-third by volume) contains many toxic hydrocarbons which evaporate and can create hazardous air concentrations in the vicinity of a spill (Allen and Ferek, 1993).

## **Analysis of the Effects of Proposed Action**

The primary objectives of a spill response are to remove as much oil as possible from the surface of the water as quickly as possible and to prevent oil from moving into nearshore and shoreline areas where removal is more difficult and environmental impacts most severe. In-situ burning, under appropriate conditions, may offer the best response option to help achieve these objectives by rapidly and efficiently removing large volumes of oil from the water surface. The benefits to listed and other species include reduced risk of oil exposure in the aquatic environment and of contamination of critical intertidal areas.

In-situ burning, however, may pose some risks to the listed species. Because both cetaceans and sea turtles must surface to breath, there is conceivably potential risk of injury from surfacing in the area of the burn. In order to maintain control of the burn, though, the area in which it is actually conducted is kept relatively small. Furthermore, an in-situ burn is of relatively short duration, typically only a few hours, due to the efficiency of the technique. The vessel activity in the burn area preceding and during a burn, as well as the unusual appearance of the burn, may deter cetaceans and turtles from remaining in or coming into an area where an in-situ burn is conducted. As described above, thermal effects on the water underlying the burn are negligible, and so pose little risk to the listed species.

Though most burn residues float and are collected, negatively buoyant residues and those that escape collection could pose some risk of exposure to sea turtles and cetaceans through ingestion or fouling of baleen. The effects of ingestion of these residues are not completely known. Even if they do cause some toxic effects, exposure is likely to be low considering the small volume of residues produced. Typically, only a small percentage of the original oil

volume remains as residue following an in-situ burn. Any unrecovered residue would certainly pose lower exposure risk than the volume of originally released product.

The overall impacts of combustion products, thermal effects, and floating burn residue are minimal in light of their short-term, localized influences and the ease with which such influences can be controlled. The location and timing of the in-situ burning, for example, can be controlled in order to minimize any exposure to wildlife, particularly listed species. Any impacts resulting from the burn would be expected to be much less severe than those manifested through exposure to a large, uncontained spill.

There is no reason to suspect that this action will add to the cumulative environmental stresses currently acting on the listed species. The effect of in-situ burning is to speed up and increase the efficiency of removal of spilled oil from the environment, and thus, to reduce the net environmental impact, including impacts to listed species.

### **Analysis of Alternatives**

As described in the Memorandums of Understanding, physical removal of oil is normally the preferred spill response option. Mechanical/manual removal of oil will remain the predominant response tool due to the nature and size of most spills, which usually are close to shore and in areas where in-situ burning would not be appropriate due to human health concerns, economics and logistic considerations. In-situ burning will be considered when and where physical removal is impossible or insufficient for protecting valuable resources, including endangered species. As discussed above, the weight of evidence indicates that for the listed species, and the environment more generally, use of in-situ burning under appropriate conditions in the designated zones is more beneficial than not burning.

This action pre-authorizes the designated Federal On-Scene Coordinator to use in-situ burning as a response technique in certain zones as described above. The alternative is to require Regional Response Team approval of the use of in-situ burning in these zones on a case-by-case basis at the time of a spill. The limited "window of opportunity" for the most optimal and effective use of in-situ burning occurs very early - usually within the first few hours - following an oil spill. Without pre-authorization to permit rapid response and mobilization of the necessary equipment, the delay for case-by-case RRT approval would realistically eliminate in-situ burning as a response option.

### **Conclusion**

The parties to the RRT4 and CRRT in-situ burn regional policies conclude that this action is not likely to adversely affect those listed species present in the subject area. We request that you concur with this conclusion.

The In-situ burn subcommittee of the Caribbean and Region 4 RRT will be responsible for providing the RRT with any available and requested reference materials related to in-situ burning. The subcommittee will update the RRT when new information regarding in-situ burning becomes available.

If any information becomes available that indicates the need for further consultation, then such consultation will be duly resumed.

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# **United States Fish and Wildlife Service**

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16465  
3 Feb 95

Ms. Lorna Patrick  
U.S. Fish and Wildlife Service  
1612 June Avenue  
Panama City, FL 32045

Dear Ms. Patrick:

I am writing to request your review of and concurrence on a biological assessment conducted pursuant to Section 7 of the Endangered Species Act. I understand that Lieutenant Commander Bradford Benggio, the National Oceanographic and Atmospheric Administration (NOAA) Scientific Support Coordinator for the United States Coast Guard Seventh District, has discussed this matter with you. Additionally, he has consulted Mr. Gregory Hogue, at the Department of Interior's Regional office in Atlanta, and Mr. James Oland of the U.S. Fish and Wildlife Service in Boqueron, Puerto Rico.

The U. S. Coast Guard, along with the Environmental Protection Agency, the Department of the Interior, the Department of Commerce, and the States of North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, and the Commonwealth of Puerto Rico, and Territories of the U.S. Virgin Islands plan to execute policy that will provide the Federal On-Scene Coordinators within Federal Region IV and the Caribbean pre-authorization to use in-situ burning within designated zones as a response countermeasure for oil spills. It is the understanding of the Federal Agencies involved that this may constitute federal action in an area where endangered and threatened species are known to occur. Consequently, consultation may be required under Section 7 of the Endangered Species Act.

This request includes the attached biological assessment in accordance with 50 CFR 402.12. Our biological assessment of this action indicates that the listed species present are not likely to be adversely affected by this action. The use of in-situ burning offers strong potential for net environmental benefit during an oil spill by allowing for increased protection of nearshore, shoreline, and down-current habitat and biological resources. It provides for a more rapid removal of oil from the environment thus subjecting fewer resources to the potential of impact. Therefore, with your concurrence, a formal consultation should not be necessary.

Sincerely,

Gerald W. Abrams  
Captain, U.S. Coast Guard  
Chief, Marine Safety Division  
Seventh Coast Guard District  
By direction of the District Commander

cc: Mr. James Oland



## **BIOLOGICAL ASSESSMENT**

This biological assessment consists of:

- a description of the area affected by the action;
- a description of the proposed action;
- a description of in-situ burning as an oil spill response technique;
- a description of the listed species present;
- a brief review of the literature on the effects of oil on the listed species of concern;
- an assessment of the risks of in-situ burning to listed species; and
- a brief assessment of alternatives to pre-authorization of in-situ burning in these zones.

### **Description of the Area**

The subject area includes two zones (see zone maps) in U.S. Coast Guard Districts 5, 7, and 8 designated in the regional policy as follows:

Zone A: The "A" zone is defined as any area within Region IV Regional Response Team (RRT IV) or the Caribbean Region Regional Response Team (CRRT) jurisdictions falling exclusively under federal jurisdiction; and not classified as a "B" or "R" zone; which is at least 3 miles seaward from any state coastline; and seaward of any state waters, or as designated by separate Letters of Agreement (LOA) with each individual state or Federal Trustee and the Regional Response Team (RRT).

Zone B: The "B" zone is defined as any area in RRT IV or the CRRT falling under state or special management jurisdiction which is not classified as an "A" or "R" zone. "B" zones are areas falling anywhere within state waters or the following special management or specified areas:

- National Marine Sanctuaries, including the Florida Keys National Marine Sanctuary;
- National or State Wildlife Refuges;
- Units of the National Park System;
- Waters designated as Marine Reserves;
- Proposed or designated Critical Habitats;
- Special endangered species use areas designated by Trustee Agency representatives;
- Waters less than 30 feet in depth that contain living coral reefs, submerged algal beds, submerged seagrass beds, and coastal wetlands including mangroves areas, saltwater marshes, salt ponds, and freshwater marshes.

Zone R: Currently no "R" zones have been identified by Region IV or the Caribbean Region. An "R" zone is defined as any area in the RRT IV and CRRT regions falling under state or special management jurisdiction which is not classified as an "A" or "B" zone. The "R" zone is that area designated by the Region IV and Caribbean Region as exclusion zones where no in-situ burn operations will be conducted.

This policy will be implemented regionally for in-situ burning throughout the offshore areas within the boundaries of the Caribbean Regional Response Team and Region IV Regional Response Team jurisdictions.

### **Description of the Proposed Action**

The policy acknowledges that in most cases the primary method for controlling released oil will be physical removal from the environment. Under certain circumstances, however, effective physical removal of oil from the water surface may not be possible or efficient enough to maximize resource protection. In such cases, in-situ burning can significantly reduce impacts to the environment, including listed species. The policy recognizes that the decision to use in-situ burning within the pre-authorization protocols rests solely with the pre-designated Federal On-Scene Coordinator (FOSC) and cannot be further delegated.

The policy provides that the FOSC may conduct in-situ burning without further concurrence within Zone A. Burning can be conducted in Zone A only when the wind is expected to carry smoke away from population centers

and other sensitive resources and if PM-10 concentrations, measured according to a monitoring plan which uses real-time particulate counters, do not exceed established human exposure limits. The decision to conduct burning will be guided by a decision tree contained in the policy. This decision tree addresses concerns related to oil type, oil amount, oil condition, environmental conditions, proximity issues, availability of personnel and equipment, and time constraints.

In-Situ burning in Zone B will require case-by-case authorization by the Region IV RRT or Caribbean RRT. In-situ burning will not be pre-authorized in Zone B areas unless designated in separate LOAs developed by the states and agreed upon by the Regional Response Team.

Prior to beginning an in-situ burn, an on-site survey will be conducted, in consultation with natural resource specialists, to determine if any threatened or endangered species are present in the burn area or otherwise at risk from any burn operations, fire, or smoke. Measures will be taken to prevent risk of injury to any wildlife, especially endangered or threatened species. Examples of potential protection measures include: moving the location of the burn to an area where listed species are not present; temporary employment of hazing techniques, if effective; and physical removal of individuals of listed species under the authority of the trustee agency. Burn residues will be collected immediately following an in-situ burn to minimize exposure to wildlife and habitat.

If a decision to use in-situ burning is made, the U.S. Environmental Protection Agency (EPA), the U.S. Department of Commerce (DOC), the U.S. Department of the Interior (DOI), and appropriate state(s) will be notified through RRT representatives as soon as possible. A post-incident briefing will be held within 45 days after an in-situ burn to exchange information on the efficacy and effects of the burn, and to determine whether any changes to the policy are needed.

### **Description of In-Situ Burning**

In-situ burning is an oil spill response technique which, when used under appropriate conditions, quickly and efficiently removes large quantities of oil from the water surface with minimal logistical support. A typical in-situ burn employs boats towing fire resistant boom in a U-shaped configuration, in which oil is collected, towed away from the main slick and ignited. The configuration is slowly towed during the burn in order to maintain the oil toward the back end of the boom at the minimum thickness necessary to sustain the burn. After the boomed oil is burned, the process is repeated. In-situ burning can be used simultaneously with other offshore oil spill response techniques or can be conducted when and where other techniques are insufficient or impossible.

Perhaps the biggest advantage of in-situ burning is that it can achieve a burn efficiency of up to 99 percent of the oil contained in the boom, a substantially higher removal efficiency than is achieved with mechanical removal or dispersants. When conditions are optimal for an effective and safe ignition, burning can eliminate spilled oil at approximately 100 gallons/day/square foot. This elimination rate means that a single 500 foot fire boom positioned in a U-configuration to intercept an ongoing spill could provide enough burn area to sustain an elimination rate of 15,000 barrels per day (Allen and Ferek, 1993, Fingas *et al.*, 1994). A major operational advantage of in-situ burning is the lack of dependence on skimming, transfer, and storage equipment for recovered oil and water.

As with any response technique, effective use of in-situ burning requires a specific set of operational, environmental, and oil slick conditions. Most crude and refined oils will burn on water if the oil layer is at least several millimeters thick (minimum of 2-3 mm), the ignition area sufficiently large, and the temperature high enough to vaporize the oil for continued combustion. Emulsification, evaporation of lighter volatiles, and the thinning of spilled oil layers can significantly reduce the successful use of controlled burning. Consequently, burning at sea is most effective early in a spill response. Due to containment requirements for ignition, relatively calm wind and sea conditions are also necessary.

Typically 97% to 98% of the heat produced during a burn is directed upward and outward so that any heat absorbed by the underlying water is generally negligible. This is particularly true where currents continuously cause an exchange of water below the burning oil. At mesoscale burn tests conducted in the Mobile, Alabama in 1992, researchers found that temperature did not increase in the static water layer at depths greater than four centimeters below the surface (Shigenaka and Barnea, 1993).

In-situ burning rapidly converts the oil into its primary combustion products, carbon dioxide and water, a small amount of other gases such as CO, NO<sub>2</sub>, and SO<sub>2</sub>, a small percentage of smoke particulates and residue byproducts. The smoke particulates and other products of combustion produce a visible smoke plume. The heat generated by the burning oil in the boom causes the smoke to rise several hundred to several thousand feet and to be carried away by the prevailing winds. Laboratory and field experiments indicate concentrations of the gases and fine particulate matter dissipate to background levels within less than two hundred meters downwind of the burn location. The exact distance depends on several factors, including size of the burn, wind velocity, and plume behavior (Walton, *et al.*, 1993, 1994. Fingus *et al.*, 1994). A small percentage of the original oil volume remains as a taffy-like residue following an in-situ burn. Floating residue can be collected easily with nets and requires relatively small volumes for temporary storage.

Potential aquatic toxicity resulting from in-situ burning has been evaluated in laboratory studies and during the Newfoundland Oil Burn Experiment (NOBE), conducted in 1993. Results of these studies indicate that in-situ burning does not adversely affect the underlying water column beyond those effects already associated with the unburned oil. Lethal and sublethal toxicity and concentrations of petroleum hydrocarbons from the water collected in the vicinity of unburned and burned crude oil slicks in the open sea were extremely low with no significant differences found between water samples collected in both areas (Daykin, *et al.*, 1994). It is important to remember that the surface area affected by in-situ burning is small relative to the total surface area and depth of a given body of water and that any adverse ecological impacts are likely to be confined to a small localized area.

## **Description of Listed Species Present**

### **Sea Turtles**

Six species of sea turtles (Kemp's (Atlantic) ridley, leatherback, hawksbill, green, loggerhead, and olive (Pacific) ridley occur in the proposed area. Kemp's Ridley (*Lepidochelys kempii*), the most endangered of these species, occurs mainly in coastal areas of the Gulf of Mexico and the northwestern Atlantic Ocean. Adults are most frequently sighted off southwestern Florida. Kemp's ridleys are a shallow water benthic feeder, preying largely on crabs. Young Kemp's ridleys may use sargassum mats or seagrass mats for refugia and foraging (Owens *et al.*, 1992, Ernst *et al.*, 1994).

Endangered leatherback turtles (*Dermochelys coriacea*) occur throughout the area and have been reported to nest on beaches in Florida and, to a lesser extent, Georgia and North Carolina. Leatherback nesting on beaches in the U.S. Caribbean is reported from the Virgin Islands (St. Croix, St. Thomas, St. John) and Puerto Rico, including Islas Culebra, Vieques, and Mona (Boulon *et al.*, 1992). The leatherback turtle is considered to be a highly pelagic species and is the only marine turtle thought to be distributed primarily in offshore waters. Leatherbacks feed primarily on jellyfish.

Endangered hawksbill sea turtles (*Eretmochelys imbricata*) are predominantly tropical but also occur in the proposed area. Hawksbills characteristically inhabit shallow rocky places and coral reefs, but also occur in shallow coastal waters such as mangrove-bordered bays, estuaries, and lagoons with mud bottoms and little or no vegetation. It is occasionally found in deep waters, and juveniles associate with floating patches of sargassum mats. Hawksbills are omnivorous opportunists that seem to prefer invertebrates, particularly sponges (Ernst *et al.*, 1994).

Atlantic Green sea turtles (*Chelonia mydas*) occur in U.S. Atlantic waters around the U.S. Virgin Islands, Puerto Rico, and along the continent U.S. from Texas to Massachusetts. They are endangered in Florida and threatened elsewhere. Green turtles nest along the east coast of Florida and in smaller numbers in the U.S. Virgin Islands, Puerto Rico, and along the Florida panhandle. Important nesting areas in Florida include Brevard, Indian River, St. Lucie, Martin, Palm Beach, and Broward Counties. Green turtles frequent shallow water grass flats, feeding on both seagrasses and algae. Areas that are known as important feeding areas for green turtles in Florida include Indian River Lagoon, Florida Keys, Florida Bay, Homosassa, Crystal River, and Cedar Key (Ehrhart *et al.*, 1991).

Loggerhead turtles (*Caretta caretta*) are threatened and occur throughout the proposed area. In the western Atlantic the great bulk of loggerhead nesting occurs along the southeastern coast of the U.S., with approximately 80 percent

occurring in Brevard, Indian River, St. Lucie, Martin, Palm Beach, and Broward Counties in Florida (NMFS, 1991). Loggerhead turtles also nest on beaches in North Carolina, South Carolina, Georgia, along the Gulf Coast of Florida, Alabama, and Mississippi. Loggerheads wander widely throughout the marine waters of their range. Hatchlings and juveniles are most often found along current fronts, downswells, or eddies associated with drifting mats of sargassum (Ernst *et al.*, 1994). Loggerheads are omnivorous and feed on a wide variety of benthic invertebrates.

The Olive Ridley turtle (*Lepidochelys olivacea*), which is threatened, primarily occurs and nests in tropical regions, including the Caribbean. It inhabits relatively shallow marine waters, typically within 15 kilometers of mainland shores, but occasionally occurs in the open sea. It is predominantly carnivorous, feeding primarily on invertebrates or protochordates that can be caught in shallow marine waters or estuarine habitats (Ernst *et al.*, 1994).

## West Indian Manatee

Two endangered subspecies of the West Indian manatee, a sirenian, occur in the area: the Florida manatee (*Trichechus manatus latirostris*) and Antillean manatee (*Trichechus manatus manatus*). Manatees most frequently dwell in protected, low-salinity waters where vegetation is abundant. They are commonly found in the waters of large, slow-moving rivers and river mouths and in shallow, low energy coastal areas such as estuaries or bays. Manatees prefer shallower estuarine and freshwater habitats, rarely venturing into offshore, open oceanic waters except to move from one favorable feeding area to another. Such movements are generally confined to inshore waters less than five meters deep (Geraci and St. Aubin, 1990). Seasonal movements result from the manatee's intolerance to cold. Populations tend to shift south in winter and make shorter movements to and from natural and artificial warm water refuges, such as artesian springs and power-plant discharges, during cold fronts. During the summer, movements are less predictable and the population is more dispersed along the coast as manatees explore alternative feeding areas.

Like other sirenians, manatees are aquatic herbivores and feed on a wide variety of submerged, emergent, floating, and shoreline vegetation. In saltwater, they feed primarily on several species of seagrass, including turtle grass (*Thalassia testudinum*), manatee grass (*Syringodium filiforme*) and shoal grass (*Halodule wrightii*). Manatees also may eat some species of algae, mangrove leaves and red mangrove seedlings. They have been known to haul themselves partially out of the water to consume bank vegetation. In freshwater manatees feed on a variety of plants, including *Hydrilla verticillata*, algae and water hyacinth (*Eichhornia crassipes*). Movements and aggregations of manatees, which spend several hours each day feeding, can be correlated with the distribution of seagrasses and vascular freshwater aquatic vegetation (Reynolds and Odell, 1991).

The Florida manatee occurs along the Atlantic and Gulf Coasts of Florida, inhabiting bays, estuaries, rivers and coastal areas where seagrasses and other vegetation are abundant. The primary range along the Atlantic Coast of Florida extends from the St. Johns River in northeastern Florida southward to the Miami area. Few manatees occur in the Florida Keys or in Florida Bay. On the Gulf Coast of Florida, manatees are abundant in the waters of the Everglades National Park and their range extends northward to the Suwannee River in summer and sporadically westward. During warm summer months, manatees have been known to travel as far north as Chesapeake Bay and as far west as Mississippi and Louisiana. Especially during cold weather, manatees tend to congregate near natural warm springs at Crystal River on the Gulf Coast and Blue Spring State Park on the St. Johns River on the Atlantic Coast of Florida. They also are drawn to warm water discharged from power plants including those at Cape Canaveral, Fort Lauderdale, Port Everglades, Riviera, Fort Myers, and Tampa Bay. Manatees also congregate near freshwater sources such as river mouths. The Indian River Lagoon is an important feeding area. Though manatees rarely venture into deeper, ocean waters, they have been reported in locations as far offshore Florida as the Dry Tortugas Islands. At an estimated population of around 1000 in Florida waters, the Florida manatee is at very serious risk of extinction (USFWS, 1989).

The Antillean manatee occurs in Puerto Rico and very rarely in the Virgin Islands. Manatees routinely cross between the islands of Puerto Rico in the proposed area (Zone A). As in other areas in the Caribbean basin, the distribution of Antillean manatees in Puerto Rico is not uniform and is most likely related to the distribution of freshwater resources, seagrass beds, and sheltered areas. In some areas, seasonal shifts in local abundance appear to correlate with the rainy season in that manatees tend to move downstream when water levels drop in the dry season. Surveys indicate most manatees are seen along the eastern and south-central coasts of Puerto Rico and tend to

congregate in the vicinity of the Roosevelt Roads Naval Station on the eastern end of the island (Rathbun and Possardt, 1986).

### **Brown Pelican**

Two subspecies of Brown Pelican, the Eastern Brown Pelican (*Pelecanus occidentalis carolinensis*) and the Caribbean Brown Pelican (*Pelecanus occidentalis occidentalis*) occur in the proposed area. The brown pelican is listed as endangered in Mississippi, Puerto Rico, and the Virgin Islands. Coastal diving birds, Brown Pelicans feed almost entirely on fish captured by plunge diving in coastal waters. They feed in both inshore and nearshore waters, though preferred feeding areas occur around root systems of fringe and overwash mangroves, water protected by coral reef barriers, bays, estuaries, and lagoons. Habitat that Brown Pelicans use for roosting and loafing includes fringe mangrove, rocky shores surrounding offshore cays, sandy beaches and littoral and deciduous woodland. They also float on the water surface. Brown Pelicans nest colonially, mostly on small coastal islands. Nests are built in bushes or low trees, and occasionally on the ground. Brown Pelicans rarely occur away from salt water and do not venture more than 20 miles out to sea except to take advantage of especially good fishing conditions (Collazo and Klaas, 1986, Fritts *et al.*, 1983).

Significant U.S. breeding populations of the Eastern Brown Pelican (*Pelecanus occidentalis carolinensis*) occur primarily in Florida and South Carolina. Eastern Brown Pelicans usually nest in early spring and summer and many spend the winter close to their nesting areas (USFWS, 1980). No nesting of brown pelicans has been documented in Mississippi, though large numbers of birds are known to occur there. They occur most commonly nearshore (Zone B area) but also frequent areas farther from shore (Zone A) in large numbers during the summer when food is plentiful, such as around fishing vessels (Goldman, 1995).

The range of the Caribbean Brown Pelican (*Pelecanus occidentalis occidentalis*) includes the Puerto Rico-U.S. Virgin Islands area. In this region, breeding colonies of the Caribbean Brown Pelican occur at several well-established sites along the coasts of the islands and are highly variable in onset and duration of nesting season. Colonies on the southwestern and western coasts of Puerto Rico (Guanica, Montvala, and Anasco Bays) are usually active on a well-defined seasonal basis. Breeding activities begin between May and August and last through February. Other colonies (Congo Cay, Cayo Conejo, Whistling Key, Dutch Cap Cay, Buck Island, and Green Cay National Wildlife Refuge) are active during most or all of the year. Nesting peaks during September through November. Important feeding areas in Puerto Rico include San Juan Bay, Dorado Lagoons and Humacao Lagoons. In the Virgin Islands, specific feeding areas are selected opportunistically, near fish schools (Collazo and Klaas, 1986).

### **Roseate Tern**

The Roseate Tern (*Sterna dougallii dougallii*) is an endangered coastal diving bird that breeds in two discrete areas in the Western Hemisphere. One population breeds on islands along the northeastern coast of the United States. The other population breeds on islands around the Caribbean Sea from the Florida Keys to the Lesser Antilles (USFWS, 1989a). Roseate terns are exclusively marine, usually breeding on small islands, but occasionally on sand dunes at the end of barrier beaches. Their nests are usually built under or adjacent to clumps of beach vegetation, rocks, driftwood, or other objects that provide cover and shelter. In the Caribbean, roseate terns nest between May and July. Chicks spend most of their time in tunnels under vegetation or rocks until they fledge (USFWS, 1989a).

Roseate Terns usually feed over open water, often in tidal channels, tide rips, or over sandbanks where currents bring fish into relatively shallow water. This species is a specialist feeder on small schooling marine fish, which it catches by plunging vertically into the water and seizing them in its bill. After feeding offshore, Roseate Terns return to shore to rest and roost, rarely resting on the water.

### **Piping Plover**

The Piping Plover (*Charadrius melodus*) is a shorebird that breeds only in North America in three geographic regions. The Atlantic Coast and Great Plains populations are threatened; the Great Lakes population is endangered. The Atlantic population breeds along the Atlantic coast of North America, from Newfoundland south to South

Carolina. Piping plovers winter more frequently along the Gulf Coast than the Atlantic Coast (Nicholls, 1989). In 1987 to 1989 survey conducted from Virginia to Louisiana, 87 percent of piping plovers observed were on the Gulf Coast of Florida to Texas. It was estimated that this represented 35 percent of the total breeding population and 56 percent of the great Lakes/Great Plains population (Nicholls, 1989). The threatened Atlantic population also winters from North Carolina to Key West, Florida and has been reported to occur in the Caribbean Islands. Major Atlantic Coast wintering areas include the southern North Carolina coast, particularly near Morehead City, the southern coast of Georgia, and the Lower Florida Keys. In the Florida Keys the stretch from 7-mile Bridge to Bahia Honda seems to be particularly favored (USFWS, 1988).

Piping Plovers along the Atlantic Coast nest on sandy beaches above the high tide line, sand flats at the ends of sandspits and barrier islands, gently sloping foredunes, blowout areas behind primary dunes, and washover cut into or between dunes. Nest sites are relatively flat and occur most commonly at sites with little vegetation, but may be found in moderately dense stands of beachgrass (*Ammophila breviligulata*). Piping Plovers feed on the intertidal ocean beach, washover areas along the shorelines of isolated dune ponds, tidal flats on the lagoon side of barrier beaches, and tidal mudflats in the saltmarshes. Plovers usually feed during low or falling tides on marine worms, fly larvae, beetles, crustaceans, molluscs, and other invertebrates, sometimes obtained from intertidal wrack debris or beachgrasses (USFWS, 1988).

### **Eskimo Curlew**

The Eskimo Curlew (*Numenius borealis*) is an almost extinct shorebird. It nests on the Arctic tundra and winters in South America. Eskimo Curlews may occur in the area, primarily in prairie grasslands, during migration in spring and fall. Its diet includes insects, crustaceans, mollusks, worms.

### **Wood Stork**

The Wood Stork (*Mycteria americana*) is an endangered wading bird that occurs along the southern Atlantic and Gulf Coasts from South Carolina in coastal shallows including Cypress swamps (nesting colonies), marshes, ponds, and lagoons. The wood stork's diet includes small fish, crustaceans, frogs, lizards and rodents. The stork will travel greater than 1000 kilometers to feeding areas.

### **Bald Eagle**

The Bald Eagle (*Haliaeetus leucocephalus*) occurs and is endangered in all of the Region IV states. A raptor, the Bald Eagle uses a large area for hunting its prey and is sensitive to chemical contaminants in the food chain. In the Southeast, fish comprise the bulk of the bald eagle's diet, though they are opportunistic feeders and supplement this with a variety of other vertebrate species, including waterfowl, sea birds and carrion.

Bald Eagle nests are usually located near open water. In the Southeast, nests are most often built high up in pine and cypress trees with a clear view of open water, though in some areas eagles nest in low mangroves. In the Southeast the nesting period usually runs from October 1 to May 15. Eagles are most vulnerable to disturbance early in the nesting period (approximately first 12 weeks). Disturbance during this period may lead to nest abandonment, decreased hatching success, or decreased survival of unfledged young. Due to the relatively low reproductive rate of Bald Eagles, this can result in significant population impacts (USFWS, 1989b).

### **Peregrine Falcon**

Both the endangered American Peregrine Falcon (*Falco peregrinus anatum*) and the recently delisted (as of October 5, 1994) Arctic Peregrine Falcon (*Falco peregrinus tundrius*) can occur in the area proposed for action. Though no longer considered biologically threatened, the Arctic peregrine falcon remains classified as "endangered due to similarity of appearance" to protect the nearly identical endangered American peregrine falcon. In the eastern part of its range, the peregrine falcon typically uses closed or semi-enclosed deciduous habitat, usually overlooking aquatic areas. Peregrines prefer cliff ledges for nesting and for night roosting of young after they have fledged, though cut banks, hollows in trees and building ledges are also used occasionally. They breed and nest in the spring.

The peregrine falcon is a raptor, preying chiefly on birds. In inland areas, prey for the peregrine consists primarily of passerine bird species such as bluejays, flickers, meadowlarks and pigeons. On the seacoast and islands, during migration and at wintering grounds, the smaller shorebirds and waterfowl are also taken. Peregrine Falcons prefer to capture their prey in flight, diving from above at great speed, and then descend to the ground to eat the prey (USFWS, 1980a).

### **Cape Sable Seaside Sparrow**

The Cape Sable Seaside Sparrow (*Ammodramus maritima*) is an endangered passerine species that inhabits coastal prairies near Cape Sable, Florida. They eat seeds, insects and small fruits.

### **Gulf Sturgeon**

Only threatened species of fish, the Gulf sturgeon (*Acipenser oxyrinchus desotoi*), occurs in the proposed area. It is an anadromous species that occurs primarily in the Northeastern Gulf of Mexico, where it ranges from the Mississippi Delta east to the Suwannee River in Florida and formerly to Tampa Bay. The Gulf sturgeon is greatly depleted throughout most of its range and now is relatively common only in a few areas (Lee *et al.*, 1980).

The anadromous Gulf sturgeon spawns in freshwater riverine habitats from April to June. Eggs adhere to vegetation and stones. Young descend to sea at about 2 to 3 years of age for winter migrations (Barkuloo, 1988). Information is lacking on whether sturgeon aggregate during their migrations. Data shows, however, that adults tend to enter and leave the freshwater system within very narrow time periods (Barkuloo, 1988). The marine habitats for the Gulf sturgeon are poorly known. Limited analyses of stomach content indicate that sand bottom, hard bottom, and seagrass beds are probably important habitats (Barkuloo, 1988). In the Big Bend area of the southeastern Gulf of Mexico, these habitats occur in 70 feet of water as far offshore as 20 miles. The Gulf sturgeon is a benthic omnivore, feeding on insects, crustaceans, mollusks, annelids and occasionally small fish (Lee, *et al.* 1980).

### **Crocodilians**

Two listed crocodilian species occur in the area. The threatened American alligator (*Alligator mississippiensis*) occurs in lakes, swamps, marshes, and rivers in the Southeastern United States. Like all alligator species, it is confined to freshwater habitats. The endangered American crocodile (*Crocodylus acutus*) occurs in nearshore marine habitats, primarily in coastal estuaries and swamps and the tidal portions of rivers. Both species are aquatic predators that hunt a wide variety of prey including small fish, invertebrates, birds and mammals. Alligators and a few species of crocodiles build mound-nests of vegetation and soil. Most crocodiles dig their nests in friable soils (Zug, 1993).

### **St. Croix Ground Lizard**

The endangered St. Croix Ground Lizard (*Ameiva polops*) occurs in the Caribbean on Green, Protestant and Ruth Cays. It is a predominantly terrestrial and largely insectivorous (Zug, 1993).

### **Beach Mice**

Five endangered subspecies of beach mice occur in the proposed area along the southern Atlantic and northwest Gulf Coasts: the Choctawhatchee beach mouse (*Peromyscus polionotus allophrys*), the Perdido Key beach mouse (*Peromyscus polionotus trissyllepsis*), the Alabama beach mouse (*Peromyscus polionotus ammobates*), the Southeastern beach mouse (*Peromyscus polionotus niveiventris*), and the Anastasia beach mouse (*Peromyscus polionotus phasma*). Southeastern and Anastasia beach mice occur on the Atlantic coast of Florida. Beach mouse habitat is restricted to the primary and secondary sand dunes and scrub dunes along the ocean front. Beach mice dig burrows mainly on the lee side of the primary dunes and in other secondary and interior dunes where the vegetation provides suitable cover. It is thought that beach mice feed primarily on the seeds of beach grasses, *Panicum amarum* and *Panicum repens*, and on sea oats, *Uniola paniculata*; however, recent food habit studies show that insects are also an important component of their diet (Holler 1990, 1991a, 1991b; USFWS, 1987, 1989c; Moyers, 1995).



## **Key Deer**

The Key deer (*Odocoileus virginianus clavium*) is an endangered subspecies of the Whitetail deer. It typically inhabits forests, swamps and open brushy areas. Key deer are browsers, eating twigs, shrubs, fungi, grass and other herbaceous plants.

## **Red Wolf**

The endangered red wolf (*Canis rufus*) may occur in the area proposed for action. It is usually found in brushy and forested areas and near river bottoms. The red wolf feeds primarily on small mammals and birds. On the Gulf Coast it also feeds on crabs.

## **Seabeach Amaranth**

The seabeach amaranth (*Amaranthus pumilus*) is a threatened annual plant species that grows on beaches and low active dunes, often covered by tides, from Rhode Island to South Carolina (Gleason and Cronquist, 1963).

# **Effects of Oil Spills on Listed Species**

## **General Effects**

General physiologic effects of oil on listed species can include immunological dysfunction, dermal lesions, liver damage, kidney damage, pulmonary damage, neurological damage, altered blood chemistry, altered osmoregulation, and potential reproductive impairment. Functions such as thermoregulation and locomotion, including buoyancy, may also be affected. Additional effects due to increased stress may manifest themselves as anemia (wasting syndrome) and increased susceptibility to predation, further spreading the contamination.

## **Sea Turtles**

Sea turtles can be exposed to spilled oil when feeding, surfacing to breath, or nesting in areas contaminated by stranded oil. Turtles are also susceptible to floating tarballs that form from unrecovered, weathered oil. There is no firm evidence that sea turtles are able to detect and avoid oil (Odell and MacMurray, 1986). Studies indicate oil exposure can have several adverse effects on turtles, including toxic responses to vapor inhalation or ingestion, skin irritation, interference with osmoregulation and ion balance, and reduced hatching success (Van Fleet and Pauly, 1987; Fritts and McGehee, 1982; Lutz and Lutcavage, 1989). Experiments on adult loggerhead turtles conducted by Lutcavage *et al.* (1993) showed that major body systems in marine turtles are adversely affected by even short exposures to weathered South Louisiana crude oil. Effects observed included alteration of blood chemistry, alteration of respiration and diving patterns, interference with osmoregulation, and skin lesions. Exposure to fresh oil would likely be considerably more harmful. Though oil exposure may not directly kill adult turtles, the effects may make them more vulnerable to predation or disease.

Oiling of sea turtle nesting habitat poses a potential risk to adult nesting turtles, hatchlings, and particularly to eggs. Turtle embryos may be especially vulnerable to effects from oil contamination. Important variables in determining the likelihood of damage are the stage of nesting, the type of oil, degree of oil weathering, amount of oil, and height of disposition on the beach. The effect of oil on the development and survival of marine turtles appears to be variable, depending on these factors. Studies by Fritts and McGhee (1982) indicate that fresh oil washing ashore to the level where nests with incubating eggs are located may result in significant embryo mortality. They also concluded that if eggs were deposited in sand after petroleum contamination has occurred and the oil has weathered significant mortality is not likely, though hatchlings may be smaller than normal. On St. Vincent National Wildlife Refuge (NWR) in 1994 beaches in the Florida panhandle became fouled with tar. Female sea turtles crawled through the tar to nest, transferring the tar to the nests. No tar was found on the eggs in the nest when excavated at the end of the season (Lewis, 1995).



In addition, it has been suggested that olfactory cues are imprinted on sea turtles as hatchlings, which guide them back to their natal beaches for nesting when they reach maturity. Oil on the beach could interfere with these chemical guides (Lutz *et al.*, 1985; Ogren, 1990; Possardt, 1990). Both eggs and hatchlings may be at additional risk of injury from clean up activities if oil strands on nesting beaches.

## **Manatees**

Little information is available regarding the effects of oil on manatees. In that manatees need to surface to breathe and tend to rest at or just below the surface of the water, they are at risk of direct exposure to oil on the water surface. Toxic vapors and contact could cause irritation of the mucous membranes of the eyes and airways, possibly leading to lung congestion or even pneumonia (Geraci and St. Aubin, 1990). The volatile fraction of crude oil (approximately one-third by volume) contains many toxic hydrocarbons which evaporate and can create hazardous air concentrations in the vicinity of a spill (Allen and Ferek, 1993). Ingestion of tar balls or plant material contaminated with fresh oil could result in absorption of toxic hydrocarbon fractions during the long retention time in the gut of this herbivore. Because their skin is thick and underlain by a thick layer of blubber, direct exposure to oil would probably not cause significant effects on thermoregulation (Geraci and St. Aubin, 1990). The aggregation of manatees into small, restricted habitats, particularly during winter, makes them susceptible to catastrophic losses. This scenario is more likely to be associated with coastal accidents than with offshore transportation of oil.

## **Birds**

Birds are extremely vulnerable to impacts from spilled oil. Marine oriented species highly adapted to life on the open ocean are at particularly high risk of direct exposure. Feathers absorb oil, interfering with critical functions such as insulation, water-repellency, buoyancy and flight. Death can result from combinations of cold, starvation, and drowning. Birds may also ingest oil while preening or from eating contaminated food, resulting in toxic effects. Ingested oil can cause anemia, pneumonia, intestinal irritation, kidney damage, altered blood chemistry, decreased growth, altered osmoregulation, and decreased production and viability of eggs. Oil contamination on egg shells, even in very small quantities, is extremely toxic to avian embryos (Fritts *et al.*, 1983).

Bird species differ in their vulnerability to oil spill impacts depending on their behavior, distribution and reproduction. Diving coastal seabirds, including the brown pelican, roseate tern, and black-capped petrel are at high risk of oil exposure because they regularly enter the water for feeding. A significant proportion of the world population of black-capped petrels could be affected by an oil spill in North Carolina. Shorebirds, wading birds, raptors and passerines are less vulnerable to exposure to free-floating oil on the water because they rarely immerse themselves in water and do not flock or roost on the water surface. All of these species are at risk, however, of contamination from oil that washes ashore. Shoreline oiling can have severe impacts on shorebirds and other species that use beach habitat for nesting, especially if they form large nesting aggregations as piping plovers do. Some species can be impacted indirectly if their primary food sources are affected. Raptors, for example, are at risk of exposure from contaminated seabirds and other prey. In-situ burning would serve to reduce these potential impacts by minimizing the amount of oil that would wash ashore or remain afloat at sea with potential to contaminate seabirds.

## **Gulf Sturgeon**

The anadromous Gulf sturgeon would be most vulnerable to oil spills during the winter marine migrations. Since the Gulf sturgeon is a benthic feeder, ingestion of contaminated sediments, organisms, or vegetation could occur if oil settles to the sea floor. The ability of Gulf sturgeon to sense and avoid oil contamination is unknown. Because the Gulf sturgeon does little or no feeding in fresh water, its growth and reproductive potential depend entirely on the resources accumulated by feeding during winter migrations. Ingestion of contaminated food and sediments could lead to general body deterioration, lower reproductive potential, and lower viability of offspring. If Gulf sturgeon do aggregate during their winter migrations, as some data indicates, significant portions of the population could be affected by a major oil release impacting aggregation areas (Barkaloo, 1988).

## **Other Listed Species**

Contamination of shoreline habitat or effects on key prey species populations are the major risks of impact associated with oil spills to listed species that spend most of their time on land, in freshwater, or in highly sheltered areas. This includes the listed terrestrial mammals, crocodilians, St. Croix ground lizard, and the seabeach amaranth.

Along Gulf Coast areas with relatively narrow beaches, an oil spill occurring during an episode of high winds and seas (a relatively common occurrence) could result in contamination of dune habitats and severe mortality of the plant and animal species associated with them. Oil stranded on the beach face also can be remobilized later by strong surf action and winds and redeposited into the primary dunes. Consequently, an oil spill reaching the shoreline could seriously impact species such as beach mice, even though the primary habitat of these subspecies is on the lee side of the dunes and their food sources are located above the high tide line. For example, the National Park Service has described the following occurrence during a small oil spill on Horn Island, Mississippi, in September 1989:

“Several days after landfall of the Horn Island spill, strong surf action and winds combined to remobilize and distribute significant amounts of oil from the beach face up into the adjacent primary dunes. The spray generated by the wind and surf action was sufficiently oily to completely coat most of the dune vegetation, and resulted in leaf browning which persisted until the next growing season” (Zimmerman, 1990).

In-situ burning would help minimize such shoreline contamination and associated ecological impacts by preventing oil from washing ashore.

### **Analysis of the Effects of Proposed Action**

The primary objectives of a spill response are to remove as much oil as possible from the surface of the water as quickly as possible and to prevent oil from moving into nearshore and shoreline areas where removal is more difficult and environmental impacts most severe. In-situ burning, under appropriate conditions, may offer the best response option to help achieve these objectives by rapidly and efficiently removing large volumes of oil from the water surface. The benefits to listed and other species include reduced risk of oil exposure in the aquatic environment and of contamination of critical intertidal areas.

Nevertheless, in-situ burning itself could pose some risks to the listed species. Because sea turtles and manatees must surface to breathe, there is conceivably potential risk of injury from surfacing in the area of the burn. Birds could fly into the burn area and be affected by the flames or the smoke plume. Some of the gaseous combustion by-products and the fine particulate material can be toxic or irritating to the respiratory system.

To maintain control of the burn, however, the area in which burning is actually conducted is kept relatively small. Furthermore, because in-situ burning is a highly efficient technique, it is of relatively short duration, typically only a few hours. The vessel activity in the burn area preceding and during a burn, as well as the unusual appearance of the burn, may deter sea turtles, birds, manatees, and other listed species from remaining in or coming into an area where an in-situ burn is conducted. As described above, thermal effects on the water underlying the burn are negligible, and so pose little risk to the listed species. Toxic gases and fine particulate matter in smoke dissipate along with the plume to background levels within a few miles of the burn location (Shigenaka and Barnea, 1993).

Though most floating burn residues float are collected, negatively buoyant residues and those that escape collection could pose some risk of exposure to sea turtles, seabirds, or manatees through ingestion. If escaped residues wash ashore, shorebirds and other listed species using shoreline habitat are potentially at risk of exposure. The effects of ingestion of these residues are not completely known. Even if they do cause some toxic effects, exposure is likely to be low considering the small volume of residues produced. Typically, only a small percentage of the original oil volume remains as residue following an in-situ burn. Any unrecovered residue would certainly pose lower exposure risk than the volume of originally released product.

The overall impacts of combustion products, thermal effects, and floating burn residue are minimal in light of their short-term, localized influences and the ease with which such influences can be controlled. The location and timing of the in-situ burning, for example, can be controlled in order to minimize any exposure to wildlife, particularly

listed species. Effects on prey of the listed species would, likewise, be minor and temporary. Any impacts resulting from the burn would be expected to be much less severe than those manifested through exposure to a large, uncontained spill.

Furthermore, most of the listed species do not occur in Zone A where in-situ burning would be conducted and so are not likely to be directly affected. Manatees very rarely venture into the deeper offshore waters of Zone A, except in Puerto Rico where they routinely cross between the islands. Brown pelicans and roseate terns are known to feed in concentrated areas in Zone A, but wading birds, shorebirds, raptors, and passerines (including the piping plover, eskimo curlew, wood stork, American bald eagle, peregrine falcon, and Cape Sable seaside sparrow) are not likely to occur in the area under consideration for action. Based on observations of hunting techniques employed in Haiti, it has been suggested by Lee (1995) that the candidate black-capped petrel may be attracted to fires, though this had not been substantiated. The listed terrestrial mammals, crocodilians, lizard, and plant species occur only in Zone B and so would not be subject to direct effects of in-situ burning. These species would benefit from in-situ burning by preventing oiling of shoreline habitat and the disturbance associated with shoreline cleanup activity. Several listed species, including piping plovers, peregrine falcons, and brown pelicans are known to be highly sensitive to human disturbance, especially when nesting. The primary human-related cause of manatee mortality is collision with watercraft. Such potential nearshore impacts from cleanup activities would be minimized by preventing oil from washing ashore.

Some hazing and removal activities can adversely affect listed species. Such activities associated with an in-situ burn would be conducted only with full coordination with the natural resource trustees. If deemed appropriate, these activities would be conducted only by authorized or permitted personnel.

This action is not expected to add to the cumulative environmental stresses currently acting on the listed species. The effect of in-situ burning is to speed up and increase the efficiency of removal of spilled oil from the environment, and thus, to reduce the net environmental impact, including impacts to listed species.

### **Analysis of Alternatives**

Physical removal of oil is normally the preferred spill response option. Mechanical/manual removal of oil will remain the predominant response tool due to the nature and size of most spills, which usually are close to shore and in areas where in-situ burning would not be appropriate due to human health concerns, economics and logistic considerations. In-situ burning will be considered when and where physical removal is impossible or insufficient for protecting valuable resources, including endangered species. As discussed above, the weight of evidence indicates that for the listed species and the environment more generally use of in-situ burning under appropriate conditions in the designated zone is more beneficial than not burning.

This action pre-authorizes the designated Federal On-Scene Coordinator to use in-situ burning as a response technique in certain zones as described above. The alternative is to require Regional Response Team approval of the use of in-situ burning in these zones on a case-by-case basis at the time of a spill. The limited "window of opportunity" for the most optimal and effective use of in-situ burning occurs very early, usually within the first few hours, following an oil spill. Without pre-authorization to permit rapid response and mobilization of the necessary equipment, the delay for case-by-case RRT approval would realistically eliminate in-situ burning as a response option.

### **Conclusion**

The parties to the Memorandums of Understanding conclude that this action is not likely to adversely affect those listed species present in the subject area. We request that you concur with this conclusion.

The In-Situ Burn Subcommittee of the RRT IV and CRRT will be responsible for providing the RRT with any available and requested reference materials related to in-situ burning. The subcommittee will update the RRT when new information regarding in-situ burning becomes available. If any information becomes available that indicates the need for further consultation, then such consultation will be duly resumed.

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## **Appendix IV**

# **In-Situ Burn Monitoring Program Within Region IV**

## **In-Situ Burn Monitoring Program within Region IV**

The Region IV Regional Response Team (RRT IV) has adapted the current U.S. Coast Guard (USCG) National Strike Force monitoring program for in-situ burn operations to allow for timely utilization of this response tool and to insure the availability of the monitoring results to the ON-Scene Coordinator (OSC) and the Federal and State Trustees involved in the response. This program is designed for assets and logistical capabilities that are provided in this region by the USCG Gulf Strike Team (GST) and the Scientific Support Coordinator's (SSC) scientific support team.

The GST has been chosen for this task because of their proven ability to quickly respond to the OSC's technical needs during an oil spill incident with properly trained and equipped personnel and logistical support. Having a government agency accomplish this task is partially dictated by the operational need for such monitoring data sets to remain in the public domain in order to insure timely availability and objective presentation of the data to the OSC.

The GST will perform the actual on-site monitoring to collect the raw data with the guidance of the SSC's scientific support team. The SSC scientific support team will assist in monitoring, analysis of the data, and forwarding of the results to the OSC in a timely manner.

The monitoring program is designed to enhance the decision making process undertaken by the OSC during the use of in-situ burning in fulfillment of his/her responsibility to insure appropriate and timely response to mitigate the effects of oil spills, as established by the Clean Water Act and defined by the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300. This monitoring program is established to attempt to provide the OSC with logical "Continue/Discontinue" input during actual operations involving in-situ burning.

Since the monitoring protocols are constantly undergoing revision and change due to improvements and enhancements made to the available technology and monitoring practices, the actual monitoring procedures and process are held under separate cover. The current monitoring protocol is available within other planning documents available to the OSC and RRT IV.



## Appendix V

# Equipment Lists

**IN-SITU BURNING EQUIPMENT STOCKPILE  
SUMMARY TABLE (March 1995)**

ORGANIZATION	LOCATION	TYPE	SIZE	AMT. (IN FEET)
1. CLEAN CARIBBEAN  PAUL SCHULER (305) 983-9880	FORT LAUDERDALE, FL	3M	18" X 24"	750
2. TEXAS GENERAL LAND OFFICE  MANNY GONZALES (512) 463-5195	CORPUS CHRISTI, TX CURTAIN FIREGARD	KEPNER SEA	21" X 27"	500  500
3. EXXON  PAUL FREDRICK (504) 561-3450	PARADIS, LA	OIL STOP	14" X 22"	500
4. ALASKA CLEAN SEAS NORTH SLOPE ALASKA  BRUCE MCKENZIE (907) 345-3142		3M 3M 3M 3M	8' X 12" 8' X 12" 12" X 18" 18" X 24"	2,508 6,000 4,600 4,400
5. ALYESKA  STEVE HOOD (907) 835-6923	VALDEZ, ALASKA	3M	12" X 18"	2,600
6. ARCO  BRUCE METCALFE / NOVA SPACE (907) 659-7843	KUPARUK, ALASKA	3M	12" X 18"	1,000
7. COOK INLET SPILL  BILL STILLINGS JIM HICKS (907) 776-5129	NIKISKI, ALASKA PREVENTION AND RESPONSE, INC.	3M 3M 3M 3M	12" X 18" 12" X 18" 12" X 18" 18" X 24"	4,000 1,000 500 1,000
8. SUMMIT HELICOPTERS  (703) 992-5500	VIRGINIA	HELITORCH	6	

ORGANIZATION	LOCATION	TYPE	SIZE	AMT. (IN FEET)
--------------	----------	------	------	----------------

9. MSRC	MIAMI, FL	OIL STOP FIRE BOOM		500
---------	-----------	--------------------	--	-----

(305) 347-2200

10. NAVY SUPSALV

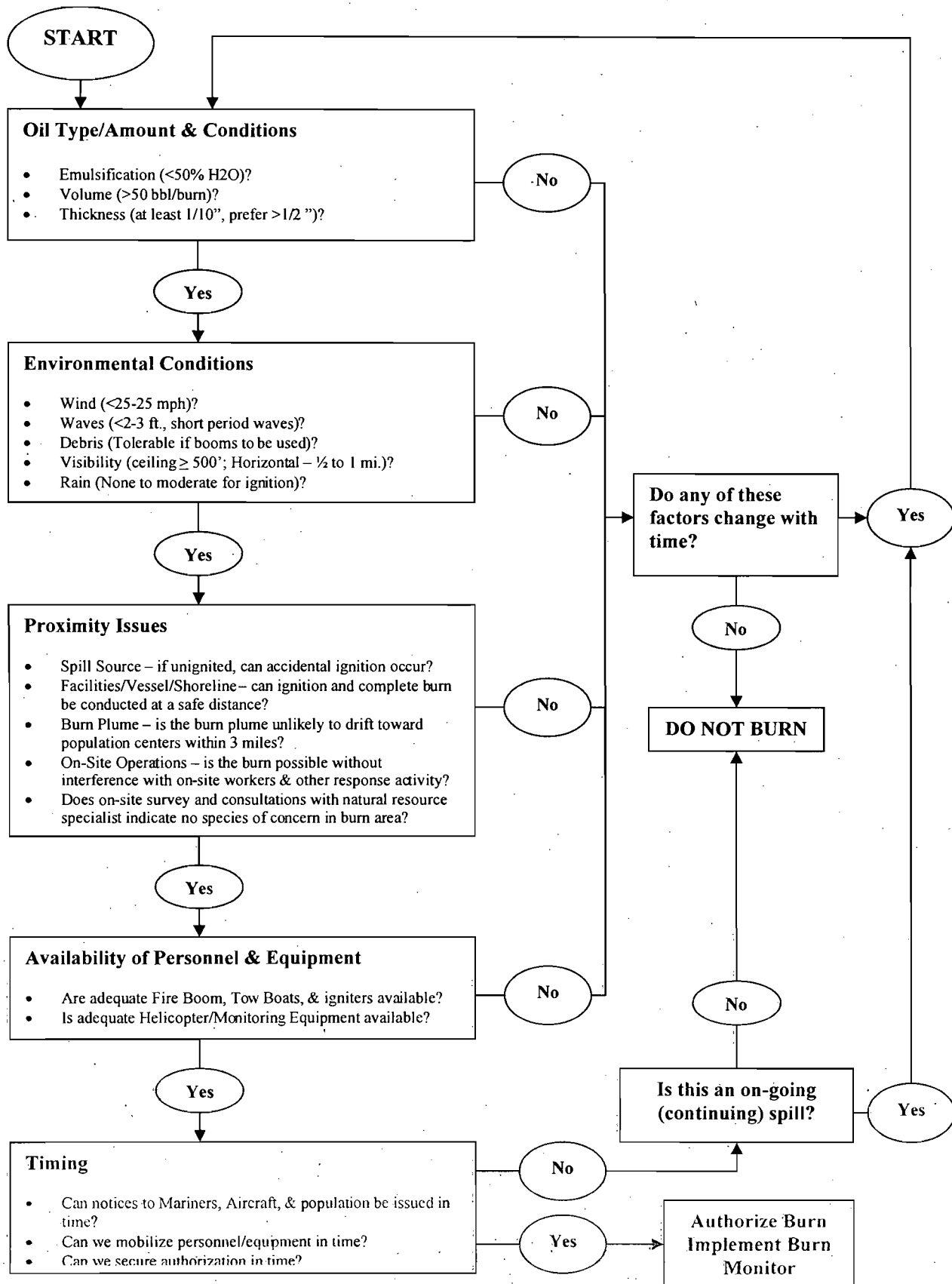
EMERGENCY SHIP SALVAGE  
MATERIAL IN-SITU BURN SYSTEM

(703) 695-0231 24 HR NUMBER

## **Appendix VI**

# **Decision Tree and Application\Checklist Forms**

## Decision Tree



## OIL SPILL RESPONSE APPLICATION \ CHECKLIST: IN-SITU BURNING

The following checklist is provided as a summary of important information to be considered by the On-Scene Coordinator (OSC) in reviewing any request to conduct in-situ burning in response to offshore oil spills within the Region 4 Regional Response Team area. This information shall be provided prior to approval of in-situ burning in all zones that are not pre-authorized. The information must be recorded for information and documentation purposes for any offshore in-situ burn.

### 1. SPILL DATA (To be completed by Responding Party and submitted to OSC)

A. Name of incident:

\_\_\_\_\_

B. Date and time of incident: Month/Day/Year \_\_\_\_\_ Time \_\_\_\_\_

C. Incident: Grounding \_\_\_\_\_ Transfer Operations \_\_\_\_\_ Collision \_\_\_\_\_  
Blowout \_\_\_\_\_ Pipeline Rupture \_\_\_\_\_ Explosion \_\_\_\_\_ Other \_\_\_\_\_

D. Did spill source ignite? Yes \_\_\_\_\_ No \_\_\_\_\_  
Is source still burning? Yes \_\_\_\_\_ No \_\_\_\_\_

E. Spill Location: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

F. Distance (in miles) and direction to nearest land: \_\_\_\_\_

G. Product(s) released:

\_\_\_\_\_

H. Product(s) easily emulsified? Yes \_\_\_\_\_ No \_\_\_\_\_  
Uncertain \_\_\_\_\_

I. Product(s) already emulsified upon release? No \_\_\_\_\_  
Light emulsion (0-20%) \_\_\_\_\_ Moderate emulsion (21-50%) \_\_\_\_\_  
Heavy emulsion (>51%) \_\_\_\_\_ Unknown \_\_\_\_\_

J. Estimated volume(s) of product released: \_\_\_\_\_ gals / bbls  
\_\_\_\_\_ gals / bbls

K. Estimated volume(s) of product that could still be released:

\_\_\_\_\_ gals \_\_\_\_\_ bbls  
\_\_\_\_\_ gals \_\_\_\_\_ bbls

- L. Release status: Continuous \_\_\_\_\_ Estimated Rate \_\_\_\_\_  
Intermittent \_\_\_\_\_ Estimated Rate \_\_\_\_\_

One time only ("batch" spill); flow now stopped \_\_\_\_\_

- M. Estimated area of spill:

Approx. Date/Time \_\_\_\_\_ Surface Area \_\_\_\_\_ Sq. Miles (Stat \_\_\_\_\_ Naut. \_\_\_\_\_)  
Approx. Date/Time \_\_\_\_\_ Surface Area \_\_\_\_\_ Sq. Miles (Stat \_\_\_\_\_ Naut. \_\_\_\_\_)  
Approx. Date/Time \_\_\_\_\_ Surface Area \_\_\_\_\_ Sq. Miles (Stat \_\_\_\_\_ Naut. \_\_\_\_\_)

**2. WEATHER AND WATER CONDITIONS AT TIME & LOCATION OF SPILL (To be completed by responding party and submitted to FOSC)**

- A. Temperature: Air \_\_\_\_\_ (deg. F) Water \_\_\_\_\_ (deg. F)
- B. Weather: Clear \_\_\_\_\_ Partly Cloudy \_\_\_\_\_ Heavy Overcast \_\_\_\_\_  
Rain \_\_\_\_\_ (heavy \_\_\_\_\_ moderate \_\_\_\_\_ light \_\_\_\_\_)  
Fog \_\_\_\_\_ (type & amount at spill source \_\_\_\_\_)  
(type & amount at burn site \_\_\_\_\_)
- C. Tidal Condition: Slack Tide \_\_\_\_\_ Flood \_\_\_\_\_ Ebb \_\_\_\_\_
- D. Dominant Surface Current (net drift):  
Speed \_\_\_\_\_ (knots)  
Direction (to) \_\_\_\_\_ (True compass heading)
- E. Wind Speed: \_\_\_\_\_ knots Wind Direction (from) \_\_\_\_\_
- F. Expected transition time between on-shore & off-shore breeze  
\_\_\_\_\_
- G. Sea State: Flat Calm \_\_\_\_\_ Light Wind-Chop \_\_\_\_\_  
Wind-Waves: <1 ft \_\_\_\_\_ 1-3 ft \_\_\_\_\_ >3 ft \_\_\_\_\_  
Swell (est. height in ft) \_\_\_\_\_
- H. Water Depth (in feet): \_\_\_\_\_
- I. Other Consideration:  
General Visibility \_\_\_\_\_  
Rip Tides/Eddies \_\_\_\_\_  
Floating Debris \_\_\_\_\_  
Submerged Hazards \_\_\_\_\_

Notes: See Section II Part I for weather and water conditions  
forecast (to be completed by NOAA Scientific Support)

Coordinator)

See Section III Part II for predicted oil behavior (to be completed by NOAA SSC)

Responding party has option of also submitting information on predicted oil behavior to OSC.

**3. PROPOSED BURNING PLAN (To be completed by party responding to spill)**

A. Location of proposed burn with respect to spill source:

---

B. Location of proposed burn with respect to nearest ignitable oil slick(s):

---

C. Location of proposed burn with respect to nearest land:

---

D. Location of proposed burn with respect to commercial fishing activity, vessel traffic lanes, drilling rigs and/or other marine activities/facilities:

---

---

---

E. Risk of accidental (secondary) fires:

---

F. Risk of reducing visibility at nearby airstrip(s) or airport(s):

---

G. Distance to, location and type of nearest population center(s) (e.g., recreational site, town, city, etc.):

---

H. Methods that will be used (prior to ignition) to notify residents in areas where smoke could conceivably drift into or over such areas:

---

I. Type of igniter proposed for use:

---

J. Helicopter(s) needed to deploy igniters? No \_\_\_\_\_ Yes \_\_\_\_\_



Name of company and type of helicopter to be used:

FAA approval already granted to company for use of igniter:

Yes \_\_\_\_\_ No \_\_\_\_\_

Awaiting FAA approval or verification of prior approval \_\_\_\_\_

K. Burning promoters or wicking agents proposed for use?

Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, give type and amount: \_\_\_\_\_

L. Describe proposed method of deployment for igniter(s)"

Burning Promoter(s):

Wicking Agent(s):

M. Describe method for oil containment, if any:

N. Proposed location of oil containment relative to spill source:

O. Proposed burning strategy:

- \_\_\_\_\_ Immediate ignition at or near source
- \_\_\_\_\_ Ignition away from source after containment and movement to safe location
- \_\_\_\_\_ Ignition of uncontained slick(s) at a safe distance
- \_\_\_\_\_ Controlled burning in boom or natural collection site at/near shore
- \_\_\_\_\_ Possible need for multiple ignition attempts

P. Estimated amount of oil to be burned:

Q. Estimated duration of each burn: \_\_\_\_\_

Total possible burn period: \_\_\_\_\_

R. Estimated smoke plume trajectory:

S. Method for collecting burned oil residue:

T. Proposed storage & disposal of burned oil residue:

**4. WEATHER AND WATER CONDITION FORECAST FROM TIME OF SPILL (To be completed by NOAA SSC)**

A. Wind Speed (knots):

24-hour projection: \_\_\_\_\_

48-hour projection: \_\_\_\_\_

B. Wind Direction (from):

24-hour projection: \_\_\_\_\_

48-hour projection: \_\_\_\_\_

C. Sea Condition:

24-hour projection:

Flat Calm \_\_\_\_\_

Light Wind-Chop \_\_\_\_\_

Wind-Waves: <1 ft \_\_\_\_\_

1-3 ft \_\_\_\_\_

>3 ft \_\_\_\_\_

Swell (est. height in ft) \_\_\_\_\_

48-hour projection:

Flat Calm \_\_\_\_\_

Light Wind-Chop \_\_\_\_\_

Wind-Waves: <1 ft \_\_\_\_\_

1-3 ft \_\_\_\_\_

>3 ft \_\_\_\_\_

Swell (est. height in ft) \_\_\_\_\_

D. Tidal Information:

Date \_\_\_\_\_ High (time/height) \_\_\_\_\_/\_\_\_\_\_

Low (time/height) \_\_\_\_\_/\_\_\_\_\_

Date \_\_\_\_\_ High (time/height) \_\_\_\_\_/\_\_\_\_\_

Low (time/height) \_\_\_\_\_/\_\_\_\_\_

Date \_\_\_\_\_ High (time/height) \_\_\_\_\_/\_\_\_\_\_

Low (time/height) \_\_\_\_\_/\_\_\_\_\_

Date \_\_\_\_\_ High (time/height) \_\_\_\_\_/\_\_\_\_\_

Low (time/height) \_\_\_\_\_/\_\_\_\_\_

E. Predicted Dominant Current (net drift):

Speed (knots): \_\_\_\_\_ Direction (to): \_\_\_\_\_

**5. PREDICTED OIL BEHAVIOR (To be completed by NOAA SSC)**

A. Unburned Oil Forecast:

Estimated trajectory (attach sketch if necessary):  
\_\_\_\_\_

B. Expected area(s) and time(s) of land fall:

Location _____	Date/Time _____
Location _____	Date/Time _____
Location _____	Date/Time _____
Location _____	Date/Time _____

C. Estimated percent naturally dispersed and evaporated:

Within first 12 hours: \_\_\_\_\_

Within first 24 hours: \_\_\_\_\_

Within first 48 hours: \_\_\_\_\_

6. **RESOURCES AT RISK (To be completed by resource agencies)**

A. Habitats

Sheltered Tidal Flats \_\_\_\_\_  
Coastal Marshes \_\_\_\_\_  
Etc. \_\_\_\_\_

B. Biological Resources

Are marine mammals, turtles, or concentrations of birds noted  
in the burn area?

Yes \_\_\_\_\_ No \_\_\_\_\_

Endangered/Threatened Species

Non-Endangered/Threatened Species

C. Historic and Archaeological Resources

D. Commercial Harvest Areas

7. **ON-SCENE COORDINATOR'S EVALUATION OF  
RESPONSE OPTIONS (To be completed by OSC)**

A. Is in-situ burning likely to result in the elimination of significant  
volumes of spilled oil?

Yes \_\_\_\_\_ No \_\_\_\_\_

B. Will the use of in-situ burning interfere with (or in any way reduce the effectiveness of) mechanical recovery and/or dispersant application?

Yes \_\_\_\_\_

No \_\_\_\_\_

C. Can in-situ burning be used safely, and with an anticipated overall reduction in environmental impact (compared with the decision not to burn)?

**8. ON-SCENE COORDINATOR'S DECISION REGARDING  
IN-SITU BURNING (To be completed by FOSC)**

A. \_\_\_\_\_ Do not conduct in-situ burn

B. \_\_\_\_\_ In-situ burn may be conducted in limited or selected areas

C. \_\_\_\_\_ In-situ burn may be conducted as requested

Note: If the OSC approves of in-situ burning, local media and residents in areas within the potential smoke plume trajectory must be notified prior to initiating the burn.

Signature of OSC: \_\_\_\_\_

Printed Name of OSC: \_\_\_\_\_

Time and Date of Decision: \_\_\_\_\_

■ Prior to ISB:

- 1) An on-site survey will be conducted to determine if threatened or endangered species are present in the burn area or otherwise at risk from in-situ burn operations. Appropriate specialists knowledgeable of threatened and endangered species and habitats in the area, will be consulted prior to conducting any in-situ burn. Measures will be taken to prevent risk of injury to any wildlife, especially endangered or threatened species.
- 2) Compliance with the Programmatic Agreement on the Protection of Historic Properties during Emergency Response Under the NCP will occur.

- Any use of in-situ burning requires that a post-incident report be provided by the FOSC, or a designated member of the FOSC's staff, within 45 days of in-situ burning operations.

### **Health and Safety Issues**

- The FOSC will notify adjacent land managers/owners prior to any in-situ burn operation.
- Operators: Assuring workers' health and safety is the responsibility of employers and the FOSC who must comply with all Occupational Health and Safety Administration (OSHA) regulations. Prior to any in-situ burn operations, a site safety plan must be prepared and approved by the FOSC.

Public: The burning should be stopped if it is determined that it becomes an unacceptable health hazard due to operational or smoke exposure concerns to responders or the general public. If at any time, exposure limits are expected to exceed national federal air quality standards in nearby populated areas, as a result of in-situ burning operations, then in-situ burning operations will immediately cease. The Level of Concern (LOC) for particulates for the general public is 150ug/m<sup>3</sup> (PM-10) averaged over 1 hour. For information purposes, Attachment 2 compares emission rates from the NOBE test burns with other known sources.

- Burning will occur at a minimum of three miles from sensitive human population centers (i.e., hospitals, schools, day care, retirement, nursing homes). The FOSC will give due consideration to the direction of the wind, and the possibility of the wind blowing precipitate over population centers or sensitive resources. A safety margin of 45 degrees of arc on either side of predicted wind vectors should be considered for shifts in wind direction.

### **When to Use**

- Consider *in situ* burning under these conditions:

- To remove oil to prevent it's spread to sensitive sites or over large areas.

- To reduce the generation of oily wastes, especially where transportation or disposal options are limited.
- Where access to the site is limited by shallow water, soft substrates, thick vegetation, or the remoteness of the location.
- As a removal technique, when other methods begin to lose effectiveness or become too intrusive.

■ Favorable conditions include:

- Remote or sparsely populated sites (at least 3 miles from populated areas).
- Fresh crudes or light/inter-mediate refined products which burn more readily and efficiently.
- Mostly herbaceous vegetation, though some shrubs and trees are fire tolerant.
- Areas void of vegetation, such as dirt roads, ditches, dry streambeds, idle cropland.
- In wetlands, with an adequate water layer (at least 1") covering the substrate (prevents thermal damage to soil and roots, and keeps oil from penetrating substrate). However, a water layer is not mandatory, at a minimum, the soils should be water saturated (at least 70%).

### **Limiting Factors/Environmental Constraints**

- Heavy, weathered, or emulsified oils may not ignite.
- A crust or residue is often left behind after burning and may need to be broken up or removed to speed restoration.
- Prolonged flooding of a burned wetland may kill surviving plants if they are completely submerged.
- Erosion may be a problem in burned areas if plant cover is reduced; short-term erosion control measures may be needed.
- The site may need protection from overgrazing, especially since herbivores may be attracted to new growth at burned sites.
- Thickness of the oil to be burned must be 2 to 3 mm.

## **Monitoring**

- Monitoring in-situ burning for effectiveness is the responsibility of the FOSC; monitoring for effects on biota is the responsibility of the trustees.
- All burns must incorporate visual monitoring at the burn site for safety and fire control and to record the disposition of burn residue. The burn site will be monitored for potential impact to natural resources in the area. Samples of the residue will be collected if feasible.
- Monitoring to establish "Continue/Discontinue" data for input to the FOSC will be conducted utilizing a tiered approach as outlined in the SMART plan. An inability to conduct monitoring operations, except for visual monitoring, will not be grounds for discontinuing or prohibiting in-situ burn operations.
- Describe and photograph the burn site before and after the burn, record detailed information on the burn, including duration, residue type and volume, water depth before/after the burn, visible impacts, post-burn activities (e.g., residue removal methods), restoration efforts and results, etc.

## **Waste Generation and Disposal Issues**

- In-situ burning should significantly reduce the amount of oily wastes generated. Burn residue that is collected must be properly disposed of after the burn is completed.

## **Attachment 1. Residues from In-Situ Burning of Oil**

Results from larger-scale laboratory and meso-scale field tests suggest that the most important factors determining whether an in-situ burn residue will float or sink are:

### **1. Water Density**

Burn residues that are denser than the receiving waters are likely to sink. The density of fresh water is 0.997 g/cm<sup>3</sup> at 25 degrees Celsius, and the density of seawater is 1.025 g/cm<sup>3</sup>.

### **2. Properties of the Starting Oil**

Studies predict that burn residues will sink in sea water when the burned oils have a) an initial greater density than about 0.0865 g/cm<sup>3</sup> (or API gravity less than about 32) or b) a weight percent distillation residue (at >1000 F) greater than 18.6%. When these correlations are applied to 137 crude oils, 38% are predicted to sink in seawater, 20% may sink, and 42% will float.

### **3. Thickness of the Oil Slick**

Residues from burns of thick crude oil slicks are more likely to sink than residues from burns of thin slicks of the same crude oils, because higher-molecular weight compounds concentrate in the residue as the burn progresses.

### **4. Efficiency of the Burn**

Factors affecting burn efficiency include original slick thickness, degree of emulsification and weathering, areal coverage of the flame, wind speed, and wave choppiness. For efficient burns, removal efficiencies are expected to exceed 90% of the collected and ignited oil. Rules of thumb for predicting residue thickness are:

- Unemulsified crude oil up to 10-20mm thick, residue will be about 1mm thick.
- Thicker slicks result in thicker residues (up to 3-6mm thick).
- Emulsified oils can produce much thicker residues.
- Light/medium refined products, the residue will be about 1mm thick, regardless of slick thickness.

Burn residues sink only after cooling. Models of cooling rates predict that ambient water temperature will be reached in less than five minutes for 3mm-thick residues, and in 20-30 minutes for 7mm-thick residues.



**Attachment 2. Emission Rates from the NOBE Test Burns and Other Known Sources.**

Substance	Average Emission Factor for NOBE (g/kg, fuel burned)	Emission Rate (kg/hr)	Comparable Emissions from Other Known Sources
CO <sub>2</sub>	2,800	75,600	approx. 2-acre slash burn
CO	17.5	470	approx. 0.1a slash burn or ~1,400 wood stoves
SO <sub>2</sub>	-15	405	7400 kg/hr. (avg. coal-fired power plant)
Total smoke particle	150	4,050	approx. 9-acre slash burn or ~58,000 wood stoves
Sub-3.5 micro-meter smoke particle	3	3,050	approx. 9-acre slash burn
Sub-3.5 micro-meter soot	55	1,480	approx. 38-acre slash burn
PAHs	0.04	1.1	Approx. 7-acre slash burn or ~1,800 wood stoves

# Region IV Inland ISB Evaluation and Response Checklist

## STEP 1: Evaluating the Need for Burning

### Nature, Size, and Type of Product Spilled

A. Name of incident:

B. Date and time of incident:

C. Type of Incident: ☐ Grounding  
☐ Transfer Operations  
☐ Explosion  
☐ Vehicle Accident  
☐ Blowout  
☐ Pipeline  
☐ Other

D. Did source burn? Yes ☐ No ☐  
Is source still burning? Yes ☐ No ☐

E. Spill location:

F. Distance and direction to nearest human use areas: \_\_\_\_\_  
(i.e., schools, hospitals, recreation areas, surface water intakes, public wells, etc.)

G. Product(s) released: ☐ Heavy Crude  
☐ Bunker C/#6 fuel oil  
☐ Medium crude  
☐ Diesel/#2 fuel oil  
☐ Jet fuels/gasoline  
☐ Other

H. Estimated volume of released product: \_\_\_\_\_ gals \_\_\_\_\_ bbls

I. Estimated volume of product potentially released: \_\_\_\_\_ gals  
\_\_\_\_\_ bbls

J. Release status: \_\_\_\_\_ Continuous \_\_\_\_\_ Intermittent  
One time only, now stopped? Yes ☐ No ☐

If continuous or intermittent, specify rate of release:  
\_\_\_\_\_ gals/bbls per hour

K. Estimated surface area covered \_\_\_\_\_ acres/sqft

## Weather: Current and Forecasted

- A. Current Weather: ☐ Clear  
☐ Partly Cloudy  
☐ Overcast  
☐ Rain/Snow/Fog  
☐ Inversion

24-hour projection:

48-hour projection:

B. Wind speed and direction are generally looked at three levels. Surface (measured at the site); 20 foot (these are usually the forecasted winds); and the transport winds. The transport winds determine where and how fast the smoke will go. These winds are generally given by the state forestry agency in the daily prescribed fire or smoke management forecast. Transport wind speed, direction and mixing height are critical components.

	<u>Surface</u>	<u>Forecasted</u>	<u>Transport</u>
Current Wind Speed (mph):	_____	_____	_____
Direction (from):	_____	_____	_____
24-hour projection (mph):	_____	_____	_____
Direction (from):	_____	_____	_____
48-hour projection (mph):	_____	_____	_____
Direction (from):	_____	_____	_____

## Evaluation of Response Operations

- A. Considering spill size, forecasted weather and trajectories, amount of available equipment, is there time to deploy mechanical recovery equipment? Yes \_\_\_ No \_\_\_
- B. Considering spill size, forecasted weather and trajectories, amount of available equipment, is there time to conduct burning operations? Yes \_\_\_ No \_\_\_
- C. Why is in-situ burning necessary?(check all that apply)

- ☐ To remove oil to prevent it's spread to sensitive sites or over large areas.
- ☐ To reduce the generation of oily wastes, especially where transportation or disposal options are limited.
- ☐ Access to the site is limited by shallow water, soft substrates, thick vegetation, or the remoteness of the location.
- ☐ Other removal methods have lost effectiveness or have become too intrusive.
- ☐ Other (specify): \_\_\_\_\_

## STEP 2: Burning Feasibility Checklist

### **Weather and Oil Conditions**

- A. Are weather conditions acceptable to conduct burn operations? Yes \_\_\_ No \_\_\_
- B. Visibility: Sufficient to see oil, containment systems, and suitable for aerial overflight for burn observation?  
Yes \_\_\_ No \_\_\_
- C. Oil Condition: 1. Fresh oil, < 2-3 days exposure. Yes \_\_\_ No \_\_\_  
2. >2-3 mm, (0.1 inch) thickness. Yes \_\_\_ No \_\_\_

### **Habitats Impacted and Resources at Risk**

- A. Local public health official/agency notified and consulted? Yes \_\_\_ No \_\_\_  
  
Name:  
Address:  
Phone:
- B. Land Owner/Manager (federal/tribal/state/private) notified and consulted? Yes \_\_\_ No \_\_\_  
  
Name:  
Address:  
Phone:
- C. Local Fire Management Officer/Fire Ecologist/State Forestry Commission consulted? Yes \_\_\_ No \_\_\_  
  
Name/Agency:  
Address:  
Phone:
- D. Historic Property Specialist pursuant to the Programmatic Agreement on Protection of Historic Properties  
During Emergency Response contacted? Yes \_\_\_ No \_\_\_  
  
Name:  
Address:  
Phone:
- E. State Natural Resource Agency notified and consulted? Yes \_\_\_ No \_\_\_  
  
Name/Agency:  
Address:  
Phone:

F. Federal Natural Resource Trustees notified and consulted

- ☐ Department of the Interior
- ☐ Tennessee Valley Authority
- ☐ U.S. Forest Service
- ☐ Department of Energy
- ☐ Department of Defense
- ☐ National Aeronautic and Space Administration
- ☐ National Oceanic and Atmospheric Administration/Dept of Commerce
- ☐ Other:

G. Native American interests present? Yes ☐ No ☐ Unknown ☐

Tribal contact:

Name:  
Address:  
Phone:

Bureau of Indian Affairs contact:

Name:  
Address:  
Phone:

H. Surface water intakes and wells (public and private): Yes ☐ No ☐

I. Habitat Type(s) Impacted:

- ☐ Southern cordgrass prairie
- ☐ Palmetto prairie
- ☐ Cypress savanna
- ☐ Wetlands
  - ☐ Estuarine
  - ☐ Riverine
  - ☐ Lacustrine
  - ☐ Palustrine
- ☐ Agricultural lands
- ☐ Other (specify):

J. Seasonal concerns: Yes ☐ No ☐  
Comments:

K. Biological Resources Present:

(Describe significant issues such as large concentrations, breeding activities, rookeries, designated critical habitat, etc.)

1. ☐ Threatened and Endangered Species, including plants (list):
2. ☐ Mammals
3. ☐ Waterfowl
4. ☐ Wading Birds
5. ☐ Diving Birds
6. ☐ Shore Birds
7. ☐ Raptors
8. ☐ Fish
9. ☐ Reptiles
10. ☐ Amphibians
11. ☐ Other
12. ☐ Comments/Attachments (i.e., ESI Maps)

L. Natural Areas (list)

1. ☐ National Park:
2. ☐ National Wildlife Refuge:
3. ☐ National Forest:
4. ☐ State Park:
5. ☐ State Wildlife Area:
6. ☐ Other Natural Areas:
7. ☐ Comments

M. Historic, Cultural, and Archeological Resources

- ☐ Unknown  
☐ Not Present  
☐ Present

## Equipment & Personnel

- A. Has the burn area been isolated (e.g., by fire breaks)? Yes \_\_\_ No \_\_\_  
Is there an approved site safety plan in place? Yes \_\_\_ No \_\_\_  
Have local fire and police departments been notified? Yes \_\_\_ No \_\_\_
- B. Are the appropriate fire fighting gear and personnel on-scene?  
Yes \_\_\_ No \_\_\_
- C. Is aircraft for ignition and aerial observation required? Yes \_\_\_ No \_\_\_  
If yes, are they available? Yes \_\_\_ No \_\_\_ (Flight requirements: daylight hours; visibility >1 mile; ceiling >500 feet, FAA certified for helitorch)
- D. Ignition System:            1. Available? Yes \_\_\_ No \_\_\_  
                                      2. Type/method to be-used? \_\_\_\_\_  
                                      3. Burn Promoters? Yes \_\_\_ No \_\_\_
- E. Personnel trained, equipped with safety gear, & covered by site safety plan? Yes \_\_\_ No \_\_\_
- F. Communications System to communicate with aircraft and fire fighters available and working? Yes \_\_\_ No \_\_\_
- G. Is access to the site restricted to response personnel only? Yes \_\_\_ No \_\_\_

## Proposed Burn Plan

- A. Proposed burning strategy (circle appropriate responses)  
1. Ignition away from source after containment  
2. Immediate ignition at or near source  
3. Ignition of uncontained slick(s) at a safe distance
- B. Estimated amount of oil to be burned: surface area \_\_\_\_\_ sq ft  
volume \_\_\_\_\_ gal/bbl
- C. Estimated duration of burn in minutes: \_\_\_\_\_
- D. Are simultaneous burns planned? Yes \_\_\_ No \_\_\_ If yes how many? \_\_\_\_\_
- E. Are sequential or repeat burns planned (not simultaneous)? Yes \_\_\_ No \_\_\_
- F. Method for terminating the burn: \_\_\_\_\_
- G. Proposed method for ignition: \_\_\_\_\_
- H. Ability to collect burned oil residue: Yes \_\_\_ No \_\_\_
- I. Estimated smoke plume trajectory (miles): \_\_\_\_\_
- J. Monitoring protocols contained in SMART will be applied as appropriate.  
Is additional monitoring required? Yes \_\_\_ No \_\_\_ If yes, attach  
additional monitoring needs and specify responsible agency.

### STEP 3: Is Burning Acceptable?

#### **Evaluation of Anticipated Emissions**

A. Using an appropriate chart, plot and calculate the following locations and distances:

1. Location of proposed burn in reference to source.
2. If on water, location of proposed burn in reference to nearest ignitable oil slick.
3. Location of proposed burn in reference to nearby human habitation/use areas, (e.g. towns, recreational use areas, airports/strips, roads, daycare centers, schools, hospitals, etc.).

B. Populations of special concern:

1. Schools \_\_\_\_
2. Hospitals \_\_\_\_
3. Retirement communities \_\_\_\_
4. Nursing/convalescence homes \_\_\_\_
5. Day care centers \_\_\_\_
6. Other \_\_\_\_

C. Determine the following:

1. Distance between proposed burn and spill source \_\_\_\_ (miles)
2. Distance between burn and human habitation/use area \_\_\_\_ (miles)
3. Surface area of the proposed burn or burns \_\_\_\_ sqft (approx.)
4. Will impairment of visibility affect airports and/or highways?  
Yes \_\_\_\_ No \_\_\_\_

D. Can burning be conducted in a controlled fashion? Yes \_\_\_\_ No \_\_\_\_  
Explain measures to reduce and/or control secondary fires.

E. Using a distance of miles with the forecasted wind and transport wind direction, plot the estimated smoke plume with particulate concentration  $>150 \text{ ug/m}^3$ .

F. Are additional pollutants of concern present in the smoke plume?  
Yes \_\_\_\_ No \_\_\_\_ If yes, what are the projected concentrations to human habitation areas? Consultation with local air and health authorities may be necessary.

G. Will the anticipated smoke plume disperse before reaching populated areas? Yes \_\_\_\_ No \_\_\_\_



## **Determination of Acceptability**

- A. Does the estimated smoke plume potentially impact a populated area with particulate concentrations averaged over one hour exceeding 150 ug/m<sup>3</sup>? Yes \_\_\_ No \_\_\_

**If No, Burning is Acceptable, proceed to Step 4.**

**If Yes, continue with B.**

- B. Can the impacted population be temporarily relocated prior to burn?  
Yes \_\_\_ No \_\_\_

**If Yes, initiate warning or evacuation and authorize burning AFTER population is protected, proceed to Step 4. If No, do NOT authorize burning!**

## **STEP 4: Controls & Conditions**

### **Operational Controls, Required for All Burns**

- A. Forecasted weather, winds and atmospheric stability class obtained?  
Yes \_\_\_ No \_\_\_
- B. A trial burn may be necessary to observe and confirm anticipated smoke plume behavior. Trial burns must have RRT approval.
- C. Safe downwind distance validated, or expanded if winds are inconsistent with anticipated forecast?  
Yes \_\_\_ No \_\_\_
- D. Burn extinguishing measures in place and available? Yes \_\_\_ No \_\_\_

### **Public Notifications**

Public notification (e.g. radio broadcast to public, safety zone broadcast to mariners, road closure, etc.) implemented? Yes \_\_\_ No \_\_\_

## Unified Command Request to the RRT For In-situ Burning

Additional conditions that apply: Yes \_\_\_\_ (Attached) No \_\_\_\_

\_\_\_\_\_  
Signature of Federal On-Scene Coordinator

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature of State On-Scene Coordinator

\_\_\_\_\_  
Printed Name

**Does Land Owner/Manager Concur? Yes \_\_\_\_ No \_\_\_\_**

\_\_\_\_\_  
Signature of Land Owner/Manager

\_\_\_\_\_  
Printed Name

### RRT Decision Regarding In-situ Burning

- A. \_\_\_\_ Do not conduct in-situ burn  
B. \_\_\_\_ In-situ burning may be conducted pursuant to attached conditions  
C. \_\_\_\_ In-situ burning may be conducted as requested in Step #3

\_\_\_\_\_  
Signature of EPA Co-Chair

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature of USCG Co-Chair

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature of DOI Representative

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature of Affected State(s)

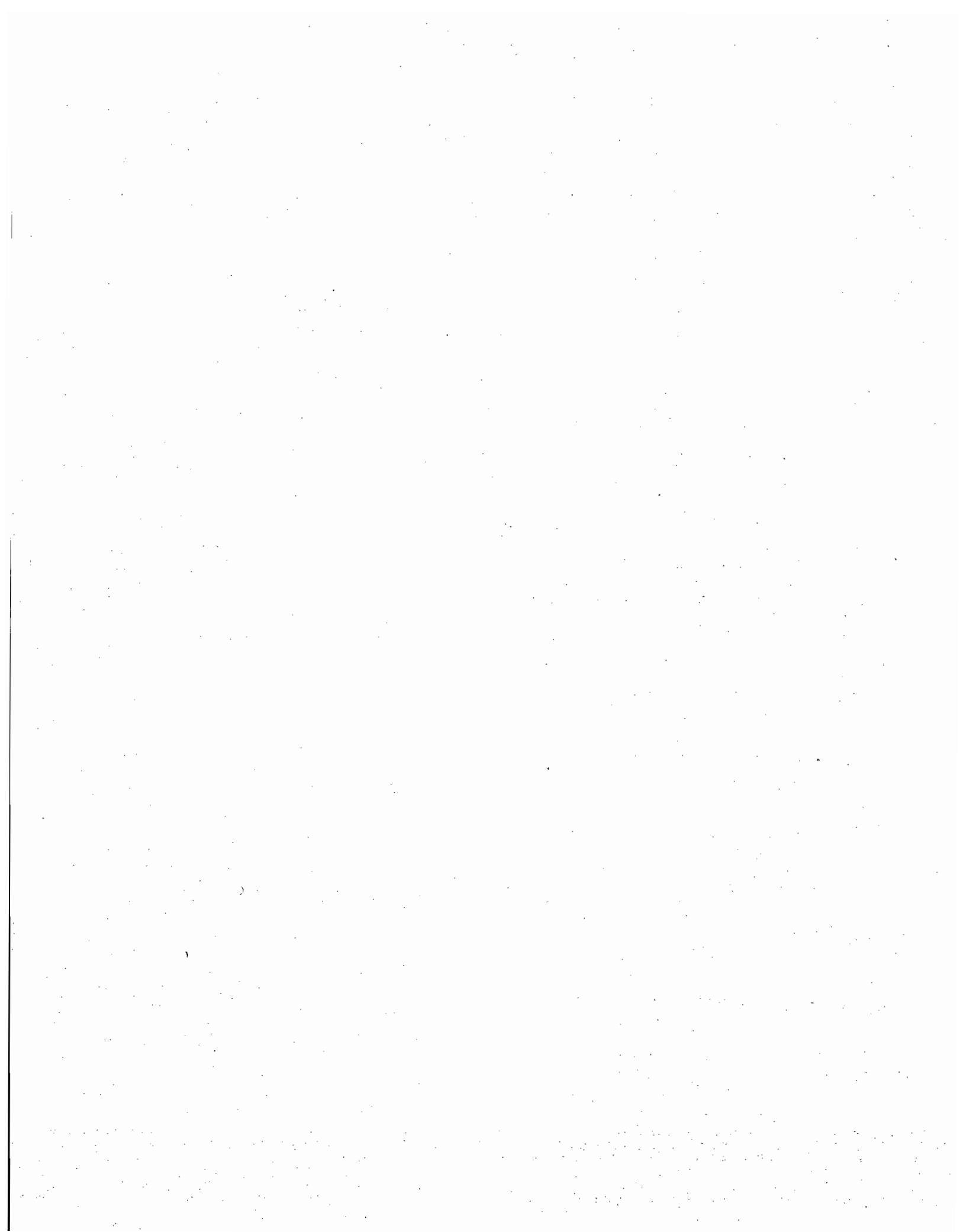
\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature of Other Federal Trustee(s)

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature of Tribal Representative

\_\_\_\_\_  
Printed Name



**Subject:** Mark and burn ops

**From:** Sara.McNulty@noaa.gov

**Date:** Tue, 22 Jun 2010 18:13:30 -0400

**To:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>, Blair Witherington <witherington@cfl.rr.com>, Brian Stacy <Brian.Stacy@noaa.gov>, Kate Sardi Sampson <Kate.Sampson@noaa.gov>, Carrie Hubbard <Carrie.W.Hubbard@noaa.gov>, Bob Hoffman <Robert.Hoffman@noaa.gov>, Kyle Baker <Kyle.Baker@noaa.gov>, Mike Ziccardi <mhziccardi@ucdavis.edu>, Wendy Teas <Wendy.Teas@noaa.gov>

Hi Everyone,

I just spoke to USCG Officer Andrew J. (Drew) from burn ops, to check in on Mark. Apparently, Mark was there for the start of a couple burns yesterday and the USCG had complete confidence in Mark immediately... and he integrated with the crew very easily. They did not burn today, but Mark was there for the process of collecting the booms. The vessel Mr Andre vessel is coming in today and will likely dock this later this evening. I tried Mark's cell and it went straight to voice mail. I suspect he will stay at the trailers tonight and may go out on the capture vessels tomorrow.

Drew said they were very interested to talk with us and Mark over the next couple days to create a plan for when the burn ops get back out on the water, likely on Saturday.

Sara



Re: Mark and burn ops

**Subject:** Re: Mark and burn ops

**From:** Kyle Baker <Kyle.Baker@noaa.gov>

**Date:** Tue, 22 Jun 2010 17:22:53 -0500

**To:** Sara McNulty@noaa.gov

**CC:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>, Blair Witherington <witherington@cfl.rr.com>, Brian Stacy <Brian.Stacy@noaa.gov>, Kate Sardi Sampson <Kate.Sampson@noaa.gov>, Carrie Hubbard <Carrie.W.Hubbard@noaa.gov>, Bob Hoffman <Robert.Hoffman@noaa.gov>, Mike Ziccardi <mhziccardi@ucdavis.edu>, Wendy Teas <Wendy.Teas@noaa.gov>

Excellent. Ops wants to do the same for skimming. Apparently bunks are full for offshore skimming. We need to nail down the data form as well. There are some fields on the decision to burn we need to make sure are included.

Sara.McNulty@noaa.gov wrote:

Hi Everyone,

I just spoke to USCG Officer Andrew J. (Drew) from burn ops, to check in on Mark. Apparently, Mark was there for the start of a couple burns yesterday and the USCG had complete confidence in Mark immediately... and he integrated with the crew very easily. They did not burn today, but Mark was there for the process of collecting the booms. The vessel Mr Andre vessel is coming in today and will likely dock this later this evening. I tried Mark's cell and it went straight to voice mail. I suspect he will stay at the trailers tonight and may go out on the capture vessels tomorrow.

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Sara

Kyle Baker <Kyle.Baker@noaa.gov>

Protected Species Biologist, Bioacoustics

Protected Resources Division

NOAA - National Marine Fisheries Service



**Subject:** Re: Mark and burn ops

**From:** Barbara Schroeder <Barbara.Schroeder@noaa.gov>

**Date:** Tue, 22 Jun 2010 18:16:31 -0400

**To:** Sara.McNulty@noaa.gov

**CC:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Blair Witherington <witherington@cfl.rr.com>, Brian Stacy <Brian.Stacy@noaa.gov>, Kate Sardi Sampson <Kate.Sampson@noaa.gov>, Carrie Hubbard <Carrie.W.Hubbard@noaa.gov>, Bob Hoffman <Robert.Hoffman@noaa.gov>, Kyle Baker <Kyle.Baker@noaa.gov>, Mike Ziccardi <mhziccardi@ucdavis.edu>, Wendy Teas <Wendy.Teas@noaa.gov>

Thanks Sara, glad to hear this.

Barbara Schroeder  
National Sea Turtle Coordinator  
National Oceanic and Atmospheric Administration - NMFS

email: [barbara.schroeder@noaa.gov](mailto:barbara.schroeder@noaa.gov)  
Phone: 301-713-2322

To cherish what remains of the earth, and to foster its renewal, is our only legitimate hope. Wendell Berry

Sara.McNulty@noaa.gov wrote:

Hi Everyone,

I just spoke to USCG Officer Andrew J. (Drew) from burn ops, to check in on Mark. Apparently, Mark was there for the start of a couple burns yesterday and the USCG had complete confidence in Mark immediately... and he integrated with the crew very easily. They did not burn today, but Mark was there for the process of collecting the booms. The vessel Mr Andre vessel is coming in today and will likely dock this later this evening. I tried Mark's cell and it went straight to voice mail. I suspect he will stay at the trailers tonight and may go out on the capture vessels tomorrow.

Drew said they were very interested to talk with us and Mark over the next couple days to create a plan for when the burn ops get back out on the water, likely on Saturday.

Sara







**Subject:** Fwd: burn team report

**From:** Sara.McNulty@noaa.gov

**Date:** Thu, 24 Jun 2010 10:02:28 -0500

**To:** Barbara Schroeder <Barbara.Schroeder@noaa.gov>, Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Mike Ziccardi <mhziccardi@ucdavis.edu>, Teri.Rowles@noaa.gov, Teri.Rowles@noaa.gov, Brian Stacy <Brian.Stacy@noaa.gov>

Here is an initial report from Mark on his burn observations. He is working on a basic protocol for observers to follow when working with the burn units.

Sara

---

**Subject:** burn team report

**From:** Mark Dodd <Mark.Dodd@dnr.state.ga.us>

**Date:** Wed, 23 Jun 2010 22:13:55 -0400

**To:** Barbara.Shroeder@noaa.gov

**CC:** Sara.McNulty@noaa.gov

Please let me know if you get this. Sorry it did not go through yesterday.

Mark

Mark G. Dodd  
Georgia Sea Turtle Program Coordinator  
Georgia Department of Natural Resources  
One Conservation Way  
Brunswick, GA 31520-8687  
Office (912) 280-6892  
Cell (912) 269-4019  
email: [Mark.Dodd@dnr.state.ga.us](mailto:Mark.Dodd@dnr.state.ga.us)

<b>burn team report.eml</b>	<b>Content-Type:</b> message/rfc822 <b>Content-Encoding:</b> 7bit
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<b>Burn Team Observations 6_21_10.doc</b>	<b>Content-Type:</b> application/octet-stream <b>Content-Encoding:</b> base64
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## Report on Deepwater Horizon burn unit operations, 6/21/10.

The goal of the trip was to observe burn unit operations, determine the likelihood of sea turtle mortality associated with surface burning activities, and assess the possibility of putting sea turtle observers with the burn unit.

Arrived on scene approx. 5 miles northeast of the Deepwater Horizon accident site at approx. 1445 hours on 6/21/10. Two burns were in progress. We observed our first burn from the crew boat *Gulf Storm*. We arrived just as the burn was ignited. Conditions were light chop and winds 7-10 knots. I was not able to survey the area prior to ignition of the first fire. The oil in the area adjacent to the crew boat was heavy oil with a small amount of widely dispersed sargassum. Large continuous areas of oil were randomly distributed around the area. In general, there was no definable pattern to the oil and no weedline present. This was the pattern I saw during the rest of the day: widely dispersed small patches of sargassum with no definable weedline.

In general, two shrimp trawlers were used to pull a boom to concentrate oil for burning. The trawlers appeared to be approx. 300-500' apart while towing the boom. The boom is 500' in length and the tow cables are 300-500'. The boom skirt drops down in the water column approx. 2.5-3 ft. The trawlers were moving forward at approx. 1/2 knot prior to and during the burn. I was told if the trawlers move too quickly, the oil goes under the bottom of the boom and is not available for the burn. If a fire is in progress, the boom will overrun the fire and put it out. The oil is ignited with a package of 2 1/2 gallon plastic jugs of diesel fuel and a flare. Once the ignition package is placed inside the boom in the concentrated oil, it takes 2-3 minutes to ignite the oil. The fire starts fairly small (10 m) diameter area and builds to an area of 30 m diameter in approx. 3 minutes. I was told by the burn teams that they do not burn the orange emulsified oil. They target the heavy brown material. I monitored the first fire for approx. 5-7 minutes but was not close enough to survey for turtles.

Following the first burn, I transferred to one of the support vessels (Fox Sea) and was quickly put on one of the ignition boats. I monitored 2 burns from the ignition boat. Conditions were calm seas, 7-10 knot winds. We surveyed the area in front of the trawlers prior to ignition and found patches of heavy oil and widely scattered sargassum. The sargassum formed no pattern and there was not a definable weedline. I did not observe any turtles in the oil or sargassum in the path of the boom. We surveyed the boomed oil for sea turtles by running along the length of the u-shaped boom at a close distance (3-10 ft). I stood on the raised foredeck of the ignition boat during the survey. A small amount of sargassum was seen at the apex of the boom. In the second fire, the sargassum and oil could be seen rolling under the boom as it moved slowly forward. I felt confident that I could survey the entire area of heavy oil in the boom prior to ignition. I did not see any turtles in the boomed area on either fire. The boomed area contained material similar to what we observed previously in the turtle capture efforts including coconuts, pieces of marsh wrack, sargassum and driftwood. If turtles were seen in the boomed material, it would be possible to capture them from the ignition boat. The chronology of the 3 fires I observed was similar with the ignition taking 2-3 minutes and

the fire slowly building over approx. 3 minutes. Some of the fires continued to burn for several hours as the trawlers moved forward collecting additional fuel (oil). Other fires were out in 15-20 minutes. Generally, the fires appeared to move fairly slowly.

We observed 2 additional booming operations that did not ultimately result in a burn. I surveyed the boomed area from the raised foredeck of the ignition boat 3-10 ft outside the boom. In these cases, the trawlers were not capturing enough oil to burn. I did not see any turtles in the boomed areas.

Burning operations were concluded at approx 1830 hours and I returned to the support boat Mister Andre for the evening. The seas increased the next day and burning operations were called off due to an approaching storm system. The boom was loaded in the morning, and we steamed back to port. The boat crews and U.S. Coast Guard personnel were very accommodating and allowed access to all aspects of the operation.

I was not able to survey the oil and sargassum from the vantage point of the shrimp trawlers due to lack of time. From the ignition boat it appeared that the shrimp trawlers were too far from the boomed material to conduct a survey for sea turtles; however, this would need to be confirmed with direct observation. Also, I was not able to survey a burned area after the fire was extinguished. Finally, my observations of the material being burned were limited to a single afternoon. Several of the crews suggested that they targeted oiled weedlines for burning when the weedlines are available.

The U.S. Coast Guard personnel indicated that they generally had 10-15 fires per day under good conditions. There are normally 5-6 teams on site. A team includes 2 boom boats (shrimp trawlers), an ignition boat, and a support vessel (crew boat).

The following are general observations from the burning operations. These observations are based on a few hours in the field with the burn crews. Additional observations will be necessary to confirm the accuracy of this report.

- 1) Burns start relatively slowly and are generally small in size.
- 2) The burn crews focus on the heavy brown oil for burning.
- 3) My impression talking with the burn crews is that they work in a relatively restricted area. It would be helpful to see a map of all burns conducted to date (their potential impact may be limited to a small area).
- 4) Pre-burn inspections for sea turtles are feasible prior to ignition.
- 5) The best platform for monitoring for sea turtles appears to be the ignition boat because of the close proximity to the material.
- 6) I was not able to survey for sea turtles from the shrimp trawlers. The possibility of using the shrimp trawlers (boom boats) as a platform for sea turtle observations should be explored.
- 7) My overall impression is that the fires start relatively slowly and are restricted to a relatively small area. The probability of mortality of free-swimming turtles is fairly low. Sea turtles mired in oil and unable to escape should be easy to spot by an observer from the ignition boat. My suggestion is to have limited observer

coverage on the ignition boats to continue to collect data on the type of material being burned and to monitor for sea turtles (1 ignition boat per day).

Mark Dodd  
Sea Turtle Program Coordinator  
Georgia Department of Natural Resources  
6/22/10





**Subject:** Nearshore Burning

**From:** Barbara Schroeder <Barbara.Schroeder@noaa.gov>

**Date:** Wed, 23 Jun 2010 17:12:12 -0400

**To:** Michael Ziccardi <mhziccardi@ucdavis.edu>, "teri.rowles@noaa.gov"  
<Teri.Rowles@noaa.gov>, Sara McNulty <Sara.McNulty@noaa.gov>, Alexis Gutierrez  
<Alexis.Gutierrez@noaa.gov>, Kyle Baker <Kyle.Baker@noaa.gov>, Robert Hoffman  
<Robert.Hoffman@noaa.gov>

----- Original Message -----

**Date:** Wed, 23 Jun 2010 16:35:34 -0400

**From:** Trindell, Robbin <robbin.trindell@MyFWC.com>

**To:** Sandy MacPherson@fws.gov <Sandy MacPherson@fws.gov>, Barbara Schroeder  
<Barbara.Schroeder@noaa.gov>, Meylan, Anne <Anne.Meylan@MyFWC.com>,  
Witherington, Blair <witherington@cfl.rr.com>

This DEP amended order (I had not seen before, don't know if FWC reviewed it) allows nearshore burning of oil. Has this been approved through incident command and what provisions are in place to survey for and to protect nesting females and other in-water animals?

--

Barbara Schroeder  
National Sea Turtle Coordinator  
National Oceanic and Atmospheric Administration - NMFS

email: [barbara.schroeder@noaa.gov](mailto:barbara.schroeder@noaa.gov)  
Phone: 301-713-2322

To cherish what remains of the earth, and to foster its renewal, is our  
only legitimate hope. Wendell Berry

second amended\_efo\_0618101.pdf

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**Content-Encoding:** base64



**STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

In re:

**EMERGENCY AUTHORIZATION FOR  
PROACTIVE MEASURES, RESTORATION,  
AND CERTAIN OTHER MEASURES MADE  
NECESSARY BY THE DEEPWATER HORIZON  
OIL SPILL**

---

**OGC NO. 10-1610**

**SECOND AMENDED EMERGENCY FINAL ORDER**

Under Sections 120.569(2)(n) and 252.36 of the Florida Statutes ("F.S."), and upon consideration of the State of Florida Executive Order Nos. 10-99, 10-100 10-106, and the following findings of fact, the State of Florida Department of Environmental Protection ("Department") enters this Emergency Final Order ("Order"), including Findings of Fact and Conclusions of Law, in response to the imminent or immediate danger to the public health, safety, and welfare of the citizens of the State of Florida resulting from the Deepwater Horizon Oil Spill that commenced on April 20, 2010 ("the Spill"). British Petroleum ("BP") has been determined to be a responsible party for the Spill.

**SPECIAL CONSIDERATIONS**

1. Governmental entities seeking reimbursement of any activities authorized in this order must do so consistent with, and as specified in, Florida's Financial Plan for Response to the Deepwater Horizon Oil Spill.
2. Governmental entities performing any activities authorized in this order shall conduct those activities in a manner consistent with the National Contingency Plan and/or the Area Contingency Plan under the National Response System.
3. Where more than one authorization under this Order is required for a proposed activity, the Department will conduct joint inspections by staff from applicable offices of the Department to the maximum extent practical.

## FINDINGS OF FACT

1. On the 20<sup>th</sup> day of April 2010, an explosion on the mobile drilling platform Deepwater Horizon occurred in the Gulf of Mexico, approximately 130 miles southeast of New Orleans, Louisiana. The rig ultimately sank on April 22, 2010; on April 24, 2010, the United States Coast Guard ("USCG") estimated that the damaged well was releasing approximately 42,000 gallons of crude oil per day. On April 28, 2010, the USCG increased this estimate to approximately 200,000 gallons per day; refinements of this estimate are ongoing. All efforts to contain the discharge have failed and may not succeed for an extended period of time. The Spill has the potential to cause widespread damage along Florida's shoreline and coastal estuaries within the following counties: Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, Wakulla, Jefferson, Taylor, Dixie, Levy, Citrus, Hernando, Pasco, Pinellas, Hillsborough, Manatee, Sarasota, Charlotte, Lee, Collier, Monroe, Miami-Dade, Broward and Palm Beach. These counties shall constitute the specific area covered by this Emergency Final Order. This area shall herein be referred to as the "Emergency Area."

2. By State of Florida Executive Order Nos. 10-99, 10-100, and 10-106, the Governor declared that a state of emergency exists throughout Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, Wakulla, Jefferson, Taylor, Dixie, Levy, Citrus, Hernando, Pasco, Pinellas, Hillsborough, Manatee, Sarasota, Charlotte, Lee, Collier, Monroe, Miami-Dade, Broward and Palm Beach counties, based upon the serious threat to the public health, safety and welfare posed by the Spill.

3. The Department finds that the Spill has created a state of emergency threatening the public health, safety, welfare, and property throughout the Emergency Area. As a result of the emergency, immediate action is necessary to prevent, contain or reduce damage to natural and cultural resources and property that may occur as a result of the Spill.

4. Oil associated with the Deepwater Horizon incident has now reached the salt waters of the State of Florida. This oil is detrimental to marine resources and endangers the health, safety, and welfare of the people of the State of Florida.

5. In situ burning of discharged oil reduces the detrimental environmental impact of discharged oil on marine resources and on the health, safety, and welfare of the people of the State of Florida.

6. The clean-up burden to the state and exposure to the public may be reduced by implementing in situ burning of oil under appropriate conditions before it reaches shore.

7. The Department finds that an emergency order is required to address the need for immediate action because the normal procedures for obtaining the necessary authorizations would not result in timely action to address the emergency.

8. The Department finds that immediate, strict compliance with the provisions of the statutes, rules, or orders noted within this Order would prevent, hinder, or delay necessary action in coping with the emergency, and that the actions authorized under this order are narrowly tailored to address the immediate need for action and are procedurally fair under the circumstances.

#### **CONCLUSIONS OF LAW**

1. Based on the findings recited above, it is hereby concluded that the emergency caused by the Spill continues to pose an immediate danger to the public health, safety, or welfare and requires an immediate order of the Department.

2. Under State of Florida Executive Order Nos. 10-99, 10-100, and 10-106, and Sections 120.569(2)(n) and 252.36, F.S., the Secretary of the Department is authorized to issue this Emergency Final Order.

3. Suspension of statutes and rules as noted within this Order is required so as not to prevent, hinder, or delay necessary action in coping with the emergency.

***THEREFORE, WITHIN THE EMERGENCY AREA, IT IS ORDERED:***

**A. SOLID WASTE MANAGEMENT**

Field authorizations may be issued prior to or following a site inspection by Department personnel for staging areas to be used for temporary storage or processing of Spill-generated debris. Such authorizations are required for all facilities that will be managing oil spill debris, including staging areas where waste is brought to the site for storage and transfer, sites where decontamination activities are being conducted, and sites where waste is being processed. No such authorization is needed under this section for sites where equipment or empty containers are being stored prior to or after use, or sites where oil spill debris is initially containerized near the cleanup area. Additional authorizations may be required by the Department's Division of Air Resource Management, as well as the Department's Coastal Construction Control Line, Joint Coastal, and Submerged Lands and Environmental Resource Permitting programs.

Field authorizations may be requested by providing a notice to the local office of the Department containing a description of the staging area design and operation, the location of the staging area, and the name, address, and telephone number of the site manager. Field authorizations also may be issued by Department staff prior to receiving written notice. Written or electronic records of all field authorizations shall be created and maintained by Department staff. Field authorizations may include specific conditions for the operation and closure of the staging area, and may include a required closure date that extends beyond the expiration date of this Order.

Staging areas shall be sited to avoid wetlands, beach and dune habitat, archaeological and historical sites, and other surface waters to the greatest extent possible; such areas that are used or affected must be fully restored upon cessation of use of the area. Persons wishing to locate staging areas on or near the beach and dune system shall utilize existing disturbed areas to the maximum extent practicable and shall first consult with the Florida Fish and Wildlife Conservation Commission ("FWC"), the Department's Bureau of Beaches and Coastal Systems

and the Department of State's Division of Historical Resources. Staging areas must cease operation, and all Spill-generated debris must be removed from the site, by the expiration date of this Order, unless a different closing date or closure conditions are specified in the field authorization. Failure to comply with the conditions of the field authorization, or failure to adequately close the site by the required closure date, may result in enforcement actions by the Department. Field authorizations issued prior to the effective date of this Order remain in effect but may be modified by the Department to include conditions and closure dates as specified herein.

**B. WATERS, WETLANDS, BEACHES & COASTAL SYSTEMS, & SUBMERGED LANDS**

**1. No Notice Required**

The following activities are authorized to be undertaken pursuant to Chapters 161, 253, 258, and Part IV of Chapter 373, F.S., and the applicable rules adopted thereunder, by BP and its contractors and by governmental entities to contain and prevent the spread of oil and oil contaminants, and to clean-up oil and oil contaminants:

(a) Placement of temporary containment booms and sorbent materials. To the maximum extent practicable, all booms and sorbent materials shall be deployed and maintained so as to minimize lying on or shading wetlands and submerged aquatic vegetation, so as to not create a navigational hazard, and so as to minimize entanglement risk or other adverse impacts to aquatic and wetland dependant fish and wildlife, and minimize adverse impacts to archaeological and historical sites.

(b) Placement and use of temporary floating devices designed exclusively to contain or collect oil contaminants at the mouths of water control structures, intake structures, canals, coastal inlets and passes, rivers, and streams, provided such devices are deployed and maintained so as to not create a navigational hazard or to cause upstream flooding or other adverse impacts to water resources to the maximum extent practicable.

(c) Placement and use of temporary devices not listed above, including air bubbler curtains, designed and used exclusively to contain, collect and prevent oil contaminants from entering coastal inlets and passes, water control structures, intake structures, canals, rivers and streams, provided such devices are deployed so as to not create a navigational hazard or to cause upstream flooding or other adverse impacts to water resources to the greatest extent practicable, and to minimize impacts to archaeological and historical sites.

(d) **Along shorelines other than sandy beaches**, installation and maintenance of hay bales, temporary sandbags or other similar materials to prevent contamination, provided such installation can be conducted, and such materials can be maintained and removed, in a manner that does not result in permanent dredging, filling or loss of wetland or submerged aquatic resources, or damage to archeological or historical resources. To the maximum extent practicable, all hay bales, sandbags or other similar materials shall be deployed so as to minimize lying on or shading wetland and submerged aquatic vegetation and to minimize adverse affects to aquatic and wetland dependant fish and wildlife. Such structures and materials shall be removed once the threat of contamination has abated. This does not authorize the construction of seawalls, bulkheads, rock revetments or other forms of retaining walls.

(e) Installation and maintenance of in-water signage or buoys warning boaters of such hazards as areas where booms and skimmers have been deployed and where heavy contamination exists. Such signage shall, to the extent practicable, be consistent with FWC standards and must adequately warn mariners of the existing hazards. Buoys shall be consistent with USCG marking for navigational hazards.

(f) Manual removal of stranded oil from sandy beaches. This method consists of removal of stranded oil, including surface oil, tar balls, tar patties, tar mats, and other weathered oil products, using hands, rakes, shovels, buckets, scrapers, sorbents, pitch forks, etc., and placing in containers. No mechanized equipment shall be used except for transportation of



collected oil and debris from the beach to the upland staging area. Equipment and vehicle access shall use only the designated beach access points. Driving of equipment along the beach shall be limited to the area seaward of the wrack or debris line to the maximum extent practicable. Equipment should transit between the beach access point and the wrack line using the most direct route to minimize travel over areas of the beach landward of the wrack or debris line. If stranded oil is present in the driving zone seaward of the wrack or debris line, driving of vehicles may occur directly landward of the stranded oil. During marine turtle nesting and shorebird nesting season (February 15-October 31), all activity shall be limited to daylight hours and all equipment and materials shall be removed from the beach at night, unless specific verbal or written approval is given by the Department for nighttime cleaning operations. All activities shall be conducted in a manner that avoids archeological and historical sites, and is in compliance with the Division of Historical Resources guidelines for archaeological and historical resources, attached hereto as Exhibit C.

(g) Mechanical removal of stranded oil and oiled sediments from sandy beaches within the following counties: Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, Wakulla, Jefferson, and Taylor. Entities undertaking activities authorized by an Incident Command Division may conduct mechanical removal of stranded oil and oiled sediments from sandy beaches. This method consists of removal of stranded oil and oiled sediments using mechanical equipment such as loaders and graders, as well as trucks, tractors and trailers for transportation of collected oil and oiled sediments. Other specialized equipment may be used for the sifting and removal of tar balls, patties, and mats. Digging of pits/trenches is authorized if subsurface oil may be present. Driving of equipment along the beach shall be limited to the area seaward of the wrack or debris line to the maximum extent practicable. Equipment should transit between the beach access point and the wrack line using the most direct route to minimize travel over areas of the beach landward of the wrack or debris line. If stranded oil is present in the driving zone seaward of the wrack or debris line, driving of vehicles may occur

directly landward of the stranded oil. During marine turtle nesting and shorebird nesting season (February 15-October 31), all activity shall be limited to daylight hours and all equipment and materials shall be removed from the beach at night, unless specific verbal or written approval is given by the Department for nighttime cleaning operations.

Mechanical removal of stranded oil and oiled sediments is authorized in accordance with the above description and the following special conditions shown below:

1. A reliable method to measure the volume of beach sediments removed during clean-up operations shall be documented and used by the entity conducting the activity. Upon completion of a section of the shoreline, an explanation of the documented method used and the recorded volume of beach sediments removed during clean-up shall be provided to the Department's Bureau of Beaches and Coastal Systems.

2. The removal of clean sand shall be minimized to the greatest extent practicable.

3. If work occurs during marine turtle and shorebird nesting seasons (February 15 – October 31), it is the responsibility of the entity conducting the activity to ensure compliance with the provisions below. Unless nighttime operations are explicitly approved as required above, all activity shall be limited to daylight hours and commence after completion of a nesting survey. All nest surveys shall be conducted only by persons with prior experience and training in the activities and who is duly authorized to conduct such activities through a valid permit issued by the FWC pursuant to Chapter 60E-1, F.A.C. All equipment and materials shall be removed from the beach at night.

- a. Sea Turtles. Activities shall be conducted in compliance with the "Sea Turtle Nest Protection Protocols for Clean-Up Crews on Beaches in Florida, Alabama, Mississippi, and Louisiana," attached hereto as Exhibit A.

- b. Shorebirds. Activities shall be conducted in compliance with the "Shorebird and Seabird Protection Protocols for Clean-up Crews on Beaches in Florida Operating Under DEP Emergency Order 10-1610," attached hereto as Exhibit B.

4. Activities shall be conducted in a manner that avoids archeological and historical sites, and is in compliance with the Division of Historical Resources guidelines for archaeological and historical resources, attached hereto as Exhibit C.

(h) Emergency beach access and upland staging areas. Creation of emergency beach access in order to place emergency response equipment on the beach, as well as creation of staging areas used to store equipment or to containerize oil spill debris, is authorized. Entities conducting the activity are encouraged to use existing beach access points and to avoid designated critical habitat for beach mice. Archaeological and historical sites must be avoided. Response/Construction equipment and supplies shall be stored landward of the beach/dune system during the night. Once the contamination has been abated, access and staging areas shall be restored to preexisting conditions. All such construction shall be limited to daylight hours after completion of a marine turtle nesting survey.

**2. Activities Requiring Field Authorizations or Emergency Permits**

**a. Wetlands and Other Surface Waters, Excluding Sandy Beaches.**

Field authorizations under Part IV of Chapter 373, F.S., and applicable rules adopted thereunder, may be issued to BP, its contractors, and governmental entities following notice to the Department and a field inspection by the Department as needed for the following activities in, on or over wetlands or other surface waters, but excluding activities on sandy beaches:

(1) Construction, use, and removal of temporary emergency response access roads and staging areas used to store equipment or to containerize oil spill debris. Such roads and staging areas shall be sited in uplands and shall use existing improved or previously cleared access points to the maximum extent practicable. If this cannot be done, construction and alteration must minimize work in wetlands or other surface waters and adverse impacts to aquatic and wetland dependant fish and wildlife to the maximum extent practicable.

Archaeological and historical sites must be avoided. Wetlands and other surface waters shall not be dredged to obtain any fill material to construct any access roads or staging areas. Once

the contamination has been abated, all areas disturbed to construct and use these areas shall be restored to former contours and shall be stabilized to prevent erosion, sedimentation, and turbid runoff. Fill material used to create these areas shall be removed to an upland location where it will not adversely affect surface water flows and in a manner that does not cause flooding of adjacent lands. Any wetlands or other surface waters that were disturbed to establish these areas shall be re-vegetated in a manner that will facilitate restoration to preexisting conditions.

(2) Other activities that are part of an oil spill response plan developed by BP, its contractors, or a governmental entity that are designed to protect or remediate impacts to wetlands or other surface waters that may be impacted by the Spill. These activities will be reviewed and approved by the Department on a case-by-case basis through issuance of a field authorization.

(3) Decontamination areas for vessels at in-shore secondary cleaning locations as provided for in the "Sector Mobile, AL Deep Draft Vessel Evaluation and Cleaning Plan" dated May 9, 2010, or as that Plan may be amended.

Field authorizations for the above activities must be requested by providing a notice to the appropriate Department District Office containing a description of the work requested, the location of the work, and the name, address, and telephone number of the applicant who may be contacted concerning the work. Field authorizations may not be issued unless requested on or before the expiration date of this Order. Field authorizations may include specific conditions for the construction, operation, maintenance, and restoration of the authorized activities. Field authorizations issued under this Order remain in effect for the duration specified in the authorization, but may be extended through written modification by the Department. Failure to comply with the conditions of a field authorization permit may result in enforcement actions by the Department.

These procedures also are supplemental to, and do not replace, the ability to perform temporary emergency measures within the geographic limits of the Northwest Florida Water Management District using the Class A and Class B Emergency Provisions of Rule 62-312.090, F.A.C.

**b. Activities on and Adjacent to the Sandy Beach Shoreline**

This section applies to activities conducted pursuant to Chapter 161, F.S., and the applicable rules adopted thereunder, seaward of the Coastal Construction Control Line ("CCCL") as established by Rule 62B-26, F.A.C. Certain activities may additionally take place seaward of the Mean High Water shoreline. Emergency Permits for such activities shall be issued by the Department's Bureau of Beaches and Coastal Systems ("Bureau").

The Bureau may issue emergency permits to governmental entities and to BP and its contractors for the activities listed below:

(1) Protection of coastal dune lakes. Upon threat of contamination, lowering the water levels to manageable levels of coastal fresh water dune lakes that have a prior, documented connection between the lake and the Gulf of Mexico, and closing the coastal dune lake outlets to prevent contamination, may be authorized. Beach-quality sand, defined in Rule 62B-41.007(2)(j), F.A.C., or other temporary measures (such as absorbent booms) shall be used to close such outlets until the threat of contamination has been abated. Applicants are encouraged to use the sand excavated to lower lake levels in order to close the outlets. However, beach quality sand obtained from upland sources may be used upon approval by the Department. All such construction shall be limited to daylight hours after completion of a marine turtle nesting survey.

(2) Construction of emergency sand dikes. To limit the lateral extent of oil contamination, the use of beach-quality sand from upland sand sources to construct a sand dike on the existing beach berm may be authorized. Such berms shall be at an appropriate contour elevation to limit the landward extent of oil incursion. Such efforts shall not result in damage to

existing dunes or dune vegetation or archaeological or historical sites. All such construction shall be limited to daylight hours after completion of a marine turtle nesting survey and be done in coordination with FWC to ensure appropriate bird surveys or designation of bird monitors. This does not authorize the construction of seawalls, bulkheads, rock revetments or other forms of retaining walls.

(3) Beach scraping/blading. Manipulation of existing non-vegetated sand that resides on the existing beach face landward of mean high water in order to protect sand resources may be authorized. All such construction shall be limited to daylight hours after completion of a marine turtle nesting survey and be done in coordination with FWC to ensure appropriate bird surveys or designation of bird monitors. Activities shall be conducted in a manner that avoids archeological and historical sites, and is in compliance with the Division of Historical Resources guidelines for archaeological and historical resources, attached hereto as Exhibit C.

(4) Other activities that are part of an oil spill response plan developed by BP, its contractors, or a governmental entity that are designed to protect or remediate impacts to the beach/dune system that may be impacted by the Spill. These activities will be reviewed and approved by the Department on a case-by-case basis through issuance of an emergency permit.

### **3. Authorization to Use State-Owned Submerged Lands**

The activities authorized above that are located in, on, or over state-owned submerged lands are hereby granted a Letter of Consent under Rule 18-21.005(1)(c)14., F.A.C., provided:

(a) The activities are conducted in accordance with the terms, conditions, and limitations of this Order; and,

(b) Activities authorized under this Order must be conducted in conformance with the general conditions of Rule 18-21.004(7), F.A.C.

(c) Archaeological and historical sites are avoided.

4. General Conditions

(a) Applicable environmental resource, surface water management, dredge and fill, stormwater, and CCCL or joint coastal permits under Chapters 161 and Part IV of Chapter 373, F.S., and applicable state-owned submerged lands authorizations shall be required for other activities not authorized in this Order that do not otherwise qualify as an exempt activity under statute or rule.

(b) Nothing in this Order authorizes the taking, attempted taking, killing, pursuing, harassing, harming, molesting, capturing, possessing, or transporting of any species (or the nest or eggs of any species) listed under Rule 68A-27, F.A.C., or under the Federal Endangered Species Act, nor does this order relieve anyone from complying with any other statute, rule, or order of the FWC.

(c) Nothing herein shall be construed to infringe upon private property rights of owners of non-state owned submerged lands.

(d) Materials and devices authorized under this Order must be removed and disposed of in accordance with a Department-approved waste disposal plan as soon as practicable after the structures or devices:

(1) Have lost their effectiveness in collecting and retaining oil, or otherwise are no longer functioning as intended;

(2) Are no longer needed to absorb, collect, or contain oil after the threat of contamination has subsided; or

(3) Have fallen into disrepair, have become hazardous, or are adversely affecting, or have the potential to adversely affect, the environment, navigation, or the property of others; or otherwise have the potential to be a continuing source of pollution.

(e) The nature, timing, and sequence of preventative measures authorized under this Order shall be conducted in such a manner as to provide protection to, and so as to not disturb, native salt-tolerant vegetation and listed species and their habitat, including threatened

or endangered marine turtles, endangered manatees, endangered beach mice, endangered plant communities, and migratory shorebirds to the greatest extent practicable. Such activities shall minimize to the greatest extent practicable entanglement hazards for marine turtles and must avoid dune habitat known to be occupied by beach mice, marked marine turtle nests, and nesting shorebirds. All activities shall be conducted in a manner that avoids archeological and historical sites, and is in compliance with the Division of Historical Resources guidelines for archaeological and historical resources, attached hereto as Exhibit C.

**C. AIR**

1. In situ burning of oil in marine waters of the State associated with the Deepwater Horizon incident is authorized within the Emergency Area. All such in situ burning shall be conducted in accordance with the MC-252 Nearshore In Situ Burn Operational Plan.

2. Any solid waste resulting from the in situ burn shall be collected and shall be managed and disposed of in accordance with the BP MC252 Incident Waste Management and Disposal Plan and the Florida statutes and rules regulating the management and disposal of solid waste.

3. All persons conducting in situ burning of oil within the marine waters of the State shall create and maintain a record of the date, time, location and duration of each in situ burn, and shall provide the Department with a copy of the record upon request by the Department.

**D. GENERAL PROVISIONS**

**1. General Limitations**

The Department issues this Emergency Final Order solely to address the emergency created by the Spill. This Order shall not be construed to authorize any activity within the jurisdiction of the Department except in accordance with the express terms of this Order. Under no circumstances shall anything contained in this Order be construed to authorize the repair, replacement, or reconstruction of any type of unauthorized or illegal structure, habitable or



otherwise. This Order does not convey any property rights or any rights or privileges other than those specified in this Order.

**2. Suspension of Statutes and Rules**

(a) Within the Emergency Area, the requirements and effects of statutes and rules that conflict with the provisions of this Order are suspended to the extent necessary to implement this Order.

(b) To the extent that any requirement to obtain a permit, consent of use, or other authorization is waived by this Order, it should also be construed that the procedural requirements for obtaining such permit, consent of use or other authorization, including requirements for fees and publication of notices, are suspended for the duration of this order.

(c) Field authorizations and emergency permits will be evaluated in accordance with the non-procedural requirements, standards, and criteria of the applicable rules of the Department and the Board of Trustees.

**3. Interagency Coordination**

The Department shall coordinate with the FWC on protected and imperiled species issues and the Division of Historical Resources regarding protection of archeological and historical sites during the review of field authorizations and emergency permits.

**4. Other Authorizations Required**

This Order only provides relief from the specific regulatory and proprietary requirements addressed herein for the duration of the Order, and does not provide relief from the requirements of other federal, state, water management districts, and local agencies. This Order therefore does not negate the need to obtain any other required permits or authorizations, nor from the need to comply with all the requirements of those agencies. This Order does not provide relief from any of the requirements of the Florida Statutes regarding registered professionals.

Activities subject to Federal consistency review that are emergency actions necessary for the repair of immediate, demonstrable threats to public health or safety are consistent with the Florida Coastal Management Program if conducted in strict conformance with this Order.

**5. Stormwater Management**

Impervious surfaces that are created or altered to establish any staging areas authorized or permitted under the terms of this Order must be designed, constructed, operated, and maintained in a manner that minimizes offsite discharge of contaminated runoff, and so as to not cause adverse water quantity impacts or flooding to on-site or off-site property and receiving waters. If any impervious surfaces created under this Order must remain for more than six months, the entity operating the staging area must apply to the Department for a permit under Part IV of Chapter 373, F.S., for stormwater (quantity and quality) review and authorization, which may require further alteration of the system to meet requirements of the applicable Department surface water regulations for the area.

**6. Department Inspections**

Any person conducting activities authorized by this Order shall allow any duly authorized representative of the Department to enter and inspect the property, premises, or place where such activities are being conducted for the purpose of ascertaining the state of compliance with the terms of this Order and with the rules of the Department. Department representatives shall also be allowed to inspect and copy any records required by this Order or the rules of the Department, to inspect any monitoring equipment or method, to sample for any pollutants or waste, and to obtain any other information necessary to determine compliance with the terms of this Order and the rules of the Department.

**7. Violation of Conditions of Emergency Final Order**

Failure to comply with any condition set forth in this Order shall constitute a violation of a Department Final Order under Chapters 161, 253, 258, 373, 376, and 403, F.S., and enforcement proceedings may be brought in any appropriate administrative or judicial forum.

8. Expiration Date

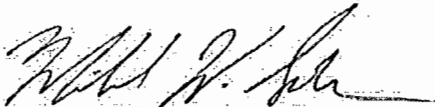
This Emergency Final Order shall take effect immediately upon execution by the Secretary of the Department, and shall expire on January 15, 2011, unless modified, revoked, or extended by further order.

**NOTICE OF RIGHTS**

Pursuant to Section 120.569(2)(n) of the Florida Statutes, any party adversely affected by this Order has the right to seek an injunction of this Order or any authorization issued hereunder in circuit court or judicial review of it under Section 120.68 of the Florida Statutes. Judicial review must be sought by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within thirty days after this Order is filed with the Clerk of the Department.

*HL*  
**DONE AND ORDERED** on this 18 day of JUNE, 2010, in Tallahassee, Florida.

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

  
Michael W. Sole, Secretary  
3900 Commonwealth Blvd  
Tallahassee, FL 32399-3000

FILED ON THIS DATE PURSUANT TO § 120.52, FLORIDA STATUTES,  
WITH THE DESIGNATED DEPARTMENT CLERK, RECEIPT OF WHICH  
IS HEREBY ACKNOWLEDGED.

  
(DEPUTY) CLERK

06/18/2010  
DATE

**Exhibit A**  
**Sea Turtle Nest Protection Protocols for Clean-up Crews**  
**on Beaches in Florida, Alabama, Mississippi, and Louisiana**

In Florida and Alabama, most sandy beaches have active sea turtle nesting survey and nest protection programs in place. However, some beaches in Florida are not surveyed on a daily basis due to logistical difficulties with access (e.g., Dauphin Island in Mobile County, Alabama; the Marquesas Islands in Monroe County, Florida) or are not currently surveyed at all (e.g., Dog Island in Franklin County, Cape Sable in the Everglades in Monroe County, Florida). No nesting surveys are conducted in Mississippi and Louisiana. Attached is a list of daily surveyed beaches by County and State; please follow the first set of protocols below for these beaches. For beaches that are not surveyed, please follow the second set of protocols.

**FOR BEACHES WHERE NESTING SURVEYS ARE CONDUCTED DAILY:**

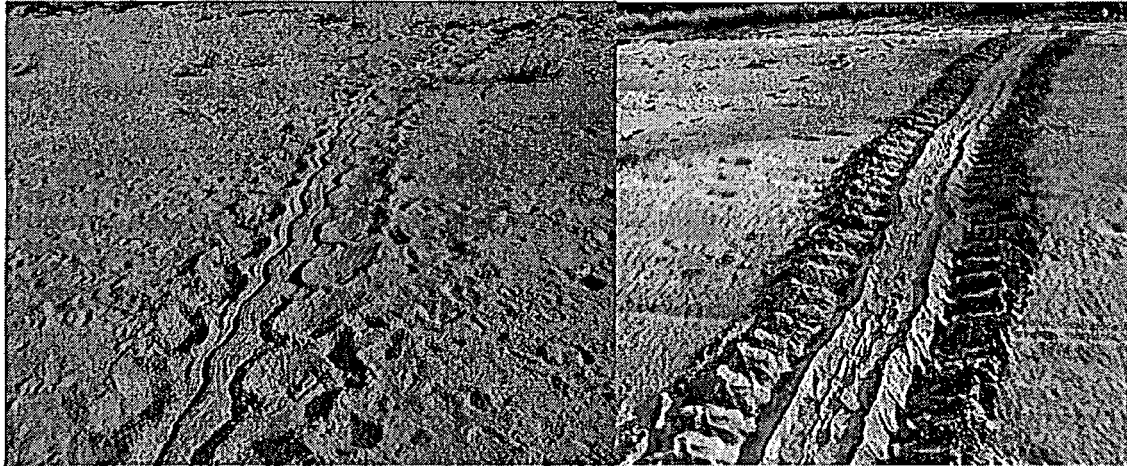
1. Ensure daily sea turtle nesting surveys have been completed and that all nests have been marked by the local sea turtle permit holder with a 10-foot buffer zone before work begins each morning. The clean-up crew leader must contact the appropriate individual identified on the attached list or his/her designee daily to determine if nesting surveys have been completed and clean-up activities can begin.
2. Sea turtles may still be nesting or hatchlings may emerge after sunrise, so it is imperative that clean-up crews watch for nesting and hatchling turtles while they are on the beach and immediately report any turtles sighted to the individual identified on the attached list or his/her designee. Clean-up vehicles should travel slowly to enable a better opportunity to spot turtle crawls and avoid colliding with nesting and hatchling turtles.
3. Look for any marked nests before beginning beach cleaning activities in an area. Nests will be marked with at least eight stakes, four around the nest perimeter and four more around a 10-foot buffer zone (see photo below). Do not remove or destroy any stakes or flagging, even if they are sited up in the dune. These may be back-up stakes that were placed to ensure that future location of the nest is possible should the nest perimeter stakes be lost.



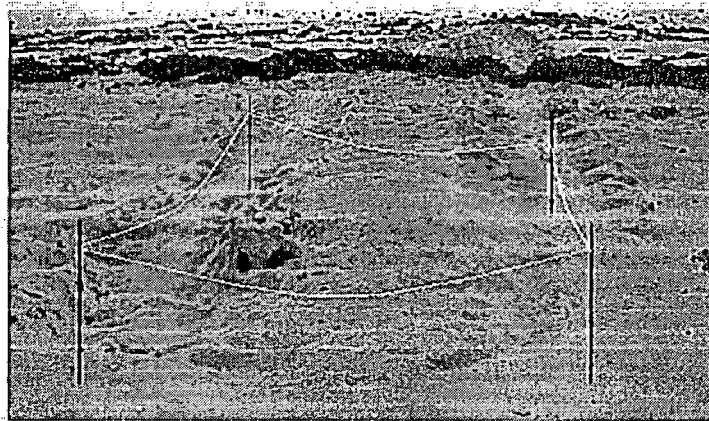
4. Mechanical equipment and hand tools should not be used within the flagged buffer area of a nest.
5. Clean-up crews should gently remove contaminated sand within the flagged area of a nest by hand and replace it with clean, damp sand taken from an area adjacent to the flagged nest area. Removal of sand over a nest should occur only under the direction of the sea turtle permit holder. The surface layer of oiled sand should be removed only to the minimum depth necessary without impacting the top of the nest. If nest flagging was removed to access the nest area, it must be securely replaced after clean-up activities have been completed.
6. All excavations and temporary alteration of beach topography shall be filled, covered, or leveled to the natural beach profile prior to 8:00 p.m. each day.

**FOR BEACHES WHERE NESTING SURVEYS ARE NOT CONDUCTED OR ARE NOT CONDUCTED DAILY:**

1. Sea turtles may still be nesting or hatchlings may emerge after sunrise, so it is imperative that clean-up crews watch for nesting and hatchling turtles while they are on the beach and immediately report any turtles sighted to the individual identified on the attached list or his/her designee. Clean-up vehicles should travel slowly to enable a better opportunity to spot turtle crawls and avoid colliding with nesting and hatchling turtles.
2. Look for any turtle crawls before beginning beach cleaning activities in an area (see photos below of turtle crawls). [In some cases, there may be marked nests on some partially surveyed beaches (steps 1-5 on the preceding page should be followed for existing nests).]



3. Follow any turtle crawls and look for signs that the turtle dug into the sand. Using stakes and flagging, mark the entire disturbed area created by a turtle digging. Under no circumstances should stakes be driven into the sand within the disturbed area created by the turtle (see photo below of a marked disturbed area – however, please double flag the nest site instead of using a single layer of flagging as shown in the photo).



4. Follow Steps 3-5 on the preceding page.

**ATTACHMENT  
SURVEYED BEACHES AND SEA TURTLE CONTACTS\***

<b>SURVEYED BEACHES</b>	<b>CONTACT NAME</b>	<b>PHONE NUMBER</b>
<b>ALABAMA</b>		
Mobile County		
Dauphin Island	Mike Reynolds	Cell: 251-747-4985 Office: 251-974-2253
Baldwin County		
Fort Morgan Peninsula, including Bon Secour National Wildlife Refuge to West Beach in Gulf Shores	Jackie Isaacs	Cell: 251-752-0654 Office: 251-540-8523
West Beach in Gulf Shores to the Alabama/Florida state line	Mike Reynolds	Cell: 251-747-4985 Office: 251-974-2253
<b>FLORIDA</b>		
Escambia County – all beaches	Robbin Trindell	Cell: 561-262-1104 Office: 850-617-6055
	Meghan Koperski (back-up)	Cell: 561-339-1001 Office: 561-575-5407 x17
Santa Rosa County – all beaches	Same as above	
Okaloosa County – all beaches	Same as above	
Walton County – all beaches	Same as above	
Bay County – all beaches	Same as above	
Gulf County – all beaches	Same as above	
Franklin County		
St. Vincent NWR (survey frequency varies)	Same as above	
Cape St. George (survey frequency varies)	Same as above	
St. George Island	Same as above	
Alligator Point		
Pinellas County – all beaches	Same as above	
Hillsborough County – all beaches	Same as above	
Manatee County – all beaches	Same as above	
Sarasota County – all beaches	Same as above	
Charlotte County – all beaches	Same as above	
Lee County – all beaches	Same as above	
Collier County – all beaches	Same as above	
Ten Thousand Islands NWR (surveyed 3-7 days/week)	Same as above	
Monroe County – all beaches (survey frequency varies)	Same as above	

\*If the beach to be cleaned is not identified on the above list or does not fall within a County where all beaches are surveyed, then clean-up crews should follow the protocols on page 2 **FOR BEACHES WHERE NESTING SURVEYS ARE NOT CONDUCTED OR ARE NOT CONDUCTED DAILY**. If you have any questions about whether a beach is surveyed or not, contact the individuals listed above for assistance.

**Exhibit B**  
**Shorebird and Seabird Protection Protocols for Clean-up Crews on Beaches in Florida**  
**Operating Under DEP Emergency Final Order, OGC Case No. 10-1610**

Shorebirds and seabirds (beach-nesting birds) nest on Florida's beaches from February 15 – September 1. Disturbance of nesting birds may result in abandonment of nests or young. Flightless chicks can be very mobile and may forage well outside posted nesting areas. They are extremely difficult to see and are susceptible to being crushed by pedestrians and equipment.

The following measures are designed to reduce the likelihood of incidental take of protected beach-nesting bird species.

Prior to movement of vehicles or heavy equipment onto the beach associated with clean-up, notification to the Florida Fish and Wildlife Conservation Commission (FWC) Regional Species Conservation Biologist (RB) shall be provided. The RB will coordinate efforts to provide qualified FWC staff or other trained Para-professionals to act as Shorebird Monitors and assist with monitoring for beach nesting birds during clean-up. If the RB in the region can not be reached, the RB in an adjacent region should be notified.

Many bird nesting areas are marked with symbolic fencing consisting of roping (twine, string, poly rope) strung between posts (wood, PVC, Carsonite) and clearly marked signs ("No Entry"). The DEP Emergency Final Order, OGC Case No. 10-1610 does not authorize entry into designated marked beach-nesting areas. If entry is needed, authorization must be given either verbally or in writing by the FWC.

Heavy equipment and vehicles should be kept as far away from these marked areas as practicable. The posting will be erected at a sufficient distance from the nest(s) to ensure that approach does not cause the birds to flush from the nest, but will not prevent the passage of vehicles/equipment necessary to conduct the project. Should project activities require that vehicles/equipment operate (stay longer than the time it takes to transit the area) within a distance that causes birds to leave the nest, the Shorebird Monitor will assist the project manager to reduce the risks of activities resulting in nest or colony abandonment.

The Shorebird Monitor(s) can provide assistance to the operators of equipment in looking for the presence of flightless young within the project area. It is the responsibility of the project manager to ensure that equipment operators coordinate closely with the Shorebird Monitor(s) to take precautions to reduce the risk that flightless young are directly injured by equipment.

All heavy equipment and vehicles operating in areas of highest probability of beach nesting birds should operate at speed no greater than 6 mph. FWC Regional Biologists or designated Shorebird Monitors can provide guidance regarding the specific locations where slow speed is advised. When in doubt regarding the probability of the presence of beach nesting birds, it is a recommended best management practice that all vehicles and heavy equipment operate at slow speeds. Flightless young are very susceptible to mortality by becoming trapped in tire ruts in the sand. All tire ruts should be smoothed or graded at the completion of the clean-up activity each day.

## Regional FWC Contacts for Shorebird Issues

### **Northwest Region**

Dr. John Himes  
FL Fish and Wildlife Conservation  
Commission  
3911 Highway 2321  
Panama City, FL 32409-1658  
(850) 265-3677/Fax (850) 747-5690  
Cell # 850-698-4781

### **North Central Region**

Dr. Terry Doonan  
FL Fish and Wildlife Conservation  
Commission  
3377 E. US Hwy 90  
Lake City, FL 32055  
(386) 758-0525/Fax (386) 758-0533  
Cell # 386 623-4986

### **Northeast Region**

Mr. Alex Kropp  
FL Fish and Wildlife Conservation  
Commission  
1239 S.W. 10th Street  
Ocala, FL 34474-2797  
(352) 732-1225/Fax (352) 620-7627  
Cell # 352-342-0063

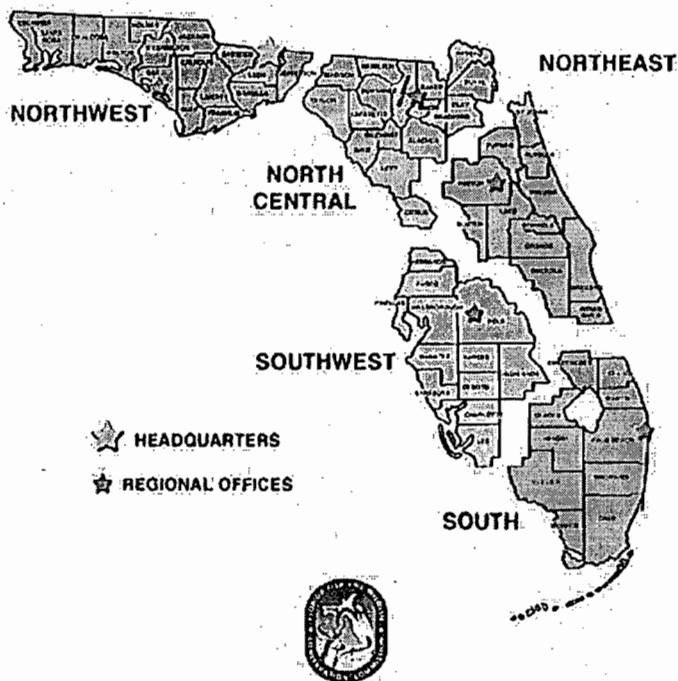
### **Southwest Region**

Ms. Nancy Douglass  
FL Fish and Wildlife Conservation  
Commission  
3900 Drane Field Road  
Lakeland, FL 33811-1299  
(863) 648-3205/Fax (863) 701-1248  
Cell # 863 581-6903

### **South Region**

Mr. Ricardo Zambrano  
FL Fish and Wildlife  
Conservation Commission  
8535 Northlake Boulevard  
West Palm Beach, FL 33412  
(561) 625-5122/Fax (561) 625-5129  
Cell # 561-248-9072

### **FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION HEADQUARTERS AND REGIONAL OFFICES**



**If a Regional Biologist cannot be reached please call:**

**1 888 404-3922**



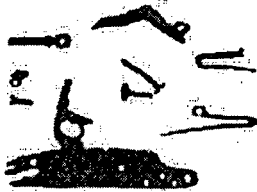
# Florida Shoreline Cleanup & Assessment ARCHAEOLOGICAL SITE PROTECTION

## Artifact Identification Guide

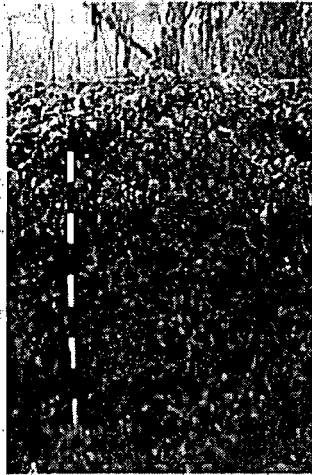
1. HISTORIC POTTERY & GLASS



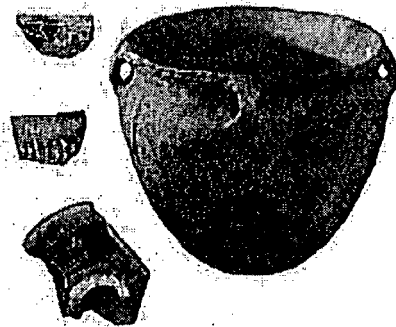
2. HISTORIC METAL(S)



5. SHELL MIDDEN



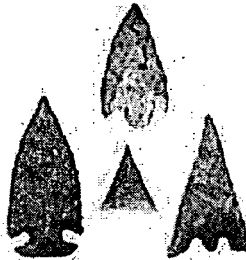
7. AMERICAN INDIAN POTTERY



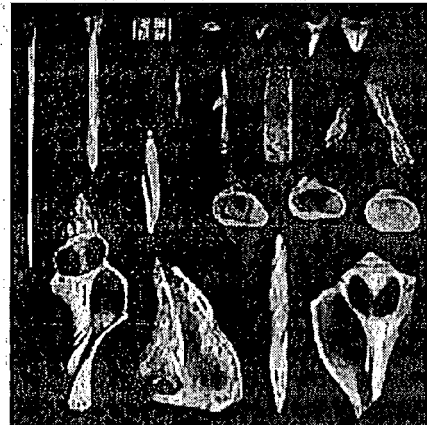
3. WOODEN VESSELS & STRUCTURES



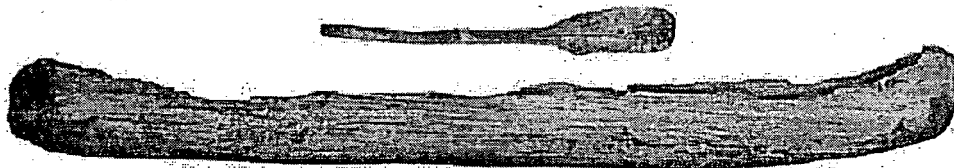
6. AMERICAN INDIAN  
STONE TOOLS



8. AMERICAN INDIAN BONE & SHELL TOOLS



4. AMERICAN INDIAN DUGOUT CANOES



Archaeological sites and artifacts are owned by the State of Florida. Discovery of objects such as those illustrated here should be reported to the Division of Historical Resources at 850 245 6530. Discovery of human bones should be reported to local law enforcement immediately. **LEAVE IT AND REPORT IT!**



# Florida Shoreline Cleanup Assessment

## ARCHAEOLOGICAL SITE PROTECTION

### LEAVE IT AND REPORT IT!

Archaeological sites and artifacts found on state owned, state-controlled or submerged bottom lands are protected by law under Chapter 267.061, Florida Statutes; removal is not permitted.

Report the discovery of any archaeological material to the Division of Historical Resources at (850) 245 6530 immediately.

Human remains are protected by law under Chapter 872.05, Florida Statutes; removal is not permitted. Discovery of human bones should be reported to local law enforcement immediately.

Sites may include shipwreck, dugout canoes, or middens made of small shell, such as shown here:



1. Historic pottery and glass objects are characteristic of Florida's early European settlers beginning in the sixteenth century. Shown here are seventeenth century Spanish pottery fragments and late eighteenth to early nineteenth century glass bottles.

2. Historic metal objects also are characteristic of early Florida settlements and include various ship, weapon, and industry-related parts and fragments. Shown here are pieces associated with an eighteenth century flintlock musket.

3. Wooden vessels and structures are typically found along the coastline and commonly include shipwrecks, houses, bridges, docks, and fish weirs. Wooden objects such as these deteriorate rapidly once exposed and should never be removed from a wet environment.

4. American Indian dugout canoes can be found along Florida's coastal waterways. Wooden objects such as canoes, paddles, or carvings, deteriorate rapidly and should never be removed from a wet environment.

5. Shell middens, such as those shown here, are thick deposits of marine shell, animal bone, and soil associated with living surfaces and disposal of food refuse. Sometimes used for burials, shell middens are rich with cultural material, including organic objects, such as wood and fiber, that do not survive once removed from these settings.

6. American Indian stone tools include a wide range of chipped and ground stone objects, such as arrowheads, knives, scrapers, or drills, and are representative of human activity that extends back to Florida's earliest peoples around 10-12,000 years ago.

7. American Indian pottery objects are made with fired clay and include jars, bowls, platters, and dishes. Made in a variety of sizes with a variety of impressed and incised surface decorations, these are usually found in fragments and most commonly date between 2,500 and 500 years ago.

8. American Indian shell tools include a wide range of objects, such as hammers, cutting tools, dippers, net sinkers, anvils, gorgets, beads, and pendants; bone artifacts include arrow points, fish hooks, awls, hair pins, beads, and various carvings.

**Subject:** Re: Nearshore Burning

**From:** Kyle Baker <Kyle.Baker@noaa.gov>

**Date:** Wed, 23 Jun 2010 17:27:28 -0500

**To:** Barbara Schroeder <Barbara.Schroeder@noaa.gov>

**CC:** Michael Ziccardi <mhziccardi@ucdavis.edu>, "Teri.Rowles@noaa.gov"  
<Teri.Rowles@noaa.gov>, Sara McNulty <Sara.McNulty@noaa.gov>, Alexis Gutierrez  
<Alexis.Gutierrez@noaa.gov>, Robert Hoffman <Robert.Hoffman@noaa.gov>,  
ROBBIN.TRINDELL@myfwc.com

Apparently, this is not valid according to the RRT IV. The Federal partners are the natural resource trustees and the EPA has air quality responsibilities. The FOSC has ultimate responsibility for all related actions and safety. It is my understanding this plan is not approved by RRT IV.

Barbara Schroeder wrote:

----- Original Message -----

**Date:** Wed, 23 Jun 2010 16:35:34 -0400

**From:** Trindell, Robbin <robbin.trindell@MyFWC.com>

**To:** Sandy MacPherson@fws.gov <Sandy MacPherson@fws.gov>, Barbara Schroeder  
<Barbara.Schroeder@noaa.gov>, Meylan, Anne <Anne.Meylan@MyFWC.com>,  
Witherington, Blair <witherington@cfl.rr.com>

This DEP amended order (I had not seen before, don't know if FWC reviewed it) allows nearshore burning of oil. Has this been approved through incident command and what provisions are in place to survey for and to protect nesting females and other in-water animals?

--  
Barbara Schroeder  
National Sea Turtle Coordinator  
National Oceanic and Atmospheric Administration - NMFS

email: [barbara.schroeder@noaa.gov](mailto:barbara.schroeder@noaa.gov)  
Phone: 301-713-2322

To cherish what remains of the earth, and to foster its renewal, is our  
only legitimate hope. Wendell Berry

Kyle Baker <Kyle.Baker@noaa.gov>

Protected Species Biologist, Bioacoustics

Protected Resources Division

NOAA - National Marine Fisheries Service



**Subject:** [Fwd: Re: [Fwd: Re: More questions/ concerns on sea turtles]]

**From:** "Barbara.Schroeder" <Barbara.Schroeder@noaa.gov>

**Date:** Mon, 28 Jun 2010 10:15:28 -0400

**To:** Alexis Gutierrez k <Alexis.Gutierrez@noaa.gov>, Kyle Baker <Kyle.Baker@noaa.gov>

**CC:** Jim Lecky <Jim.Lecky@noaa.gov>, Helen Golde <Helen.Golde@noaa.gov>, David Cottingham <David.Cottingham@noaa.gov>, David Bernhart <David.Bernhart@noaa.gov>

All - please see below. We need to develop answers to the 5 numbered items below.

----- Original Message -----

**Subject:**Re: [Fwd: Re: More questions/ concerns on sea turtles]

**Date:**Mon, 28 Jun 2010 09:58:53 -0400

**From:**Deb Lambert <Deb.Lambert@noaa.gov>

**To:**Jim Lecky <Jim.Lecky@noaa.gov>, Helen Golde <Helen.Golde@noaa.gov>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>

**CC:**Samuel Rauch <Samuel.Rauch@noaa.gov>

**References:**<4C251500.3030005@noaa.gov>

Good morning,

Can you give me a status update on the responses to the three questions below?

- (1) Has NOAA developed a protocol giving direction to its biologists (both those on BP burn boats and those on NOAA boats) on how they will find and rescue turtles in planned burn areas;
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- (3) Have the BP contractors carrying out the burn operations been informed of the protocol and have they agreed to provide NOAA's biologists with the necessary time and access to proposed burn areas to accomplish their assignments.

Also, are these details regarding turtles correct:

- (1) with the support of the Unified Joint Command, NOAA is putting biological observers on the burn boats on an experimental basis; and
- (2) NOAA has contracted with 20 boat captains to help biologists with sea turtle rescue operations (increased from 6).

We will need these answers by the end of the day.

Thank you,  
Deb

Samuel Rauch wrote:

Can we get answers to these questions

----- Original Message -----

**Subject:**Re: More questions/ concerns on sea turtles

**Date:**Fri, 25 Jun 2010 16:07:20 -0400

**From:**Eric Schwaab <Eric.Schwaab@noaa.gov>

**To:**'kostyack@nwf.org' <kostyack@nwf.org>

**CC:**'samuel.rauch@noaa.gov' <Samuel.Rauch@noaa.gov>

John - in #2, my understanding is that these are not 20 boat captains, but 20 people to conduct independent search and rescue of turtles. I am copying this to Sam Rauch who can direct this to the right people to confirm staffing issues and to address protocol questions. Thanks.

---

**From:** John Kostyack <kostyack@nwf.org>

**To:** Schwaab, Eric <Eric.Schwaab@noaa.gov>

**Sent:** Fri Jun 25 15:55:13 2010

**Subject:** More questions/ concerns on sea turtles

Hi Eric-

Thanks for the taking the time to speak with me on the phone yesterday. As we discussed, the reports of BP carrying out burn operations in areas where turtles are known are extremely worrisome. I have since consulted with a number of NWF colleagues as well as various sea turtle experts and everyone is grateful that NOAA is taking action in response to these reports. However, questions still remain about whether the burning of turtles may be continuing.

My understanding is that NOAA is doing two things to address this issue: (1) with the support of the Unified Joint Command, you are putting biological observers on the burn boats on an experimental basis; and (2) you have contracted with 20 boat captains to help biologists with sea turtle rescue operations (increased from 6). (Please let me know if I got any of these details wrong.)

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Thanks in advance for your help with this. Please let me know what NWF can do to assist you.

John

John Kostyack  
Executive Director, Wildlife Conservation  
and Global Warming  
901 E Street, N.W., Suite 401  
Washington, DC 20004  
office: (202) 797-6879  
cell: (202) 360-7481  
[kostyack@nwf.org](mailto:kostyack@nwf.org)  
twitter: @kostyack

Global Warming Safeguards:  
Safeguarding Nature for People and Wildlife  
<http://www.nwf.org/globalwarming>

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Debra Lambert  
Office of the Assistant Administrator  
NOAA Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910

Phone: (301) 713-2239 x206  
Email: [deb.lambert@noaa.gov](mailto:deb.lambert@noaa.gov)





**Subject:** Re: [Fwd: Re: [Fwd: Re: More questions/ concerns on sea turtles]]  
**From:** "Barbara.Schroeder" <Barbara.Schroeder@noaa.gov>  
**Date:** Mon, 28 Jun 2010 10:25:26 -0400  
**To:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>  
**CC:** Kyle Baker <Kyle.Baker@noaa.gov>, Jim Lecky <Jim.Lecky@noaa.gov>, Helen Golde <Helen.Golde@noaa.gov>, David Cottingham <David.Cottingham@noaa.gov>, David Bernhart <David.Bernhart@noaa.gov>

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Hi Barbara,

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**From:** Deb Lambert <Deb.Lambert@noaa.gov>  
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**References:** <4C251500.3030005@noaa.gov>

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To: 'kostyack@nwf.org' <kostyack@nwf.org>  
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\*To\*: Schwaab, Eric <Eric.Schwaab@noaa.gov>  
\*Sent\*: Fri Jun 25 15:55:13 2010  
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Washington, DC 20004

office: (202) 797-6879

cell: (202) 360-7481

[kostyack@nwf.org](mailto:kostyack@nwf.org)

twitter: @kostyack

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--

Debra Lambert  
Office of the Assistant Administrator  
NOAA Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910

Phone: (301) 713-2239 x206 Email: [deb.lambert@noaa.gov](mailto:deb.lambert@noaa.gov)



**Subject:** Re: [Fwd: Re: [Fwd: Re: More questions/ concerns on sea turtles]]

**From:** David Cottingham <David.Cottingham@noaa.gov>

**Date:** Mon, 28 Jun 2010 10:43:42 -0400

**To:** "Barbara.Schroeder" <Barbara.Schroeder@noaa.gov>

**CC:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>, Kyle Baker <Kyle.Baker@noaa.gov>, Helen Golde <Helen.Golde@noaa.gov>, David Bernhart <David.Bernhart@noaa.gov>

A + B --

thanks for jumping on this quickly. helen's downtown all morning.

Alexis & Kyle should take the first crack at them and send them to Teri & Barbara first, then on up. Does NOAA/ UCC have such criteria?

dc

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\*Subject\*: More questions/ concerns on sea turtles

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--  
David Cottingham  
Chief, Division of Marine Mammal and Sea Turtle Conservation  
NMFS Office of Protected Resources

phone: 301-713-2322 ext 101  
fax: 301-427-2522

David Cottingham <[david.cottingham@noaa.gov](mailto:david.cottingham@noaa.gov)>  
Chief, Marine Mammal & Sea Turtle Conservation Division  
National Marine Fisheries Service



**Subject:** Re: [Fwd: Re: [Fwd: Re: More questions/ concerns on sea turtles]]  
**From:** "Barbara.Schroeder" <Barbara.Schroeder@noaa.gov>  
**Date:** Mon, 28 Jun 2010 14:59:30 -0400  
**To:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>  
**CC:** David Cottingham <David.Cottingham@noaa.gov>, Kyle Baker <Kyle.Baker@noaa.gov>, Helen Golde <Helen.Golde@noaa.gov>, David Bernhart <David.Bernhart@noaa.gov>

Here are my comments on the draft. Thanks.

Alexis Gutierrez wrote:

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Alexis Gutierrez wrote:

Hi Barbara,

When do we need to do this by. Do you want Kyle/Alexis to take the first crack? We can that this am and get something back by noonish if necessary. Let us know if this works for everyone and then we will proceed with drafting. Thanks, A

Barbara.Schroeder wrote:

All - please see below. We need to develop answers to the 5 numbered items below.

----- Original Message -----

**Subject:** Re: [Fwd: Re: More questions/ concerns on sea turtles]  
**Date:** Mon, 28 Jun 2010 09:58:53 -0400  
**From:** Deb Lambert <Deb.Lambert@noaa.gov>  
**To:** Jim Lecky <Jim.Lecky@noaa.gov>, Helen Golde <Helen.Golde@noaa.gov>, Barbara Schroeder <Barbara.Schroeder@noaa.gov>  
**CC:** Samuel Rauch <Samuel.Rauch@noaa.gov>  
**References:** <4C251500.3030005@noaa.gov>

Good morning,

Can you give me a status update on the responses to the three questions below?

- (1) Has NOAA developed a protocol giving direction to its biologists (both those on BP burn boats and those on NOAA boats) on how they will find and rescue turtles in planned burn areas;
- (2) If so, are there enough trained biologists to carry out this

protocol and ensure that no turtles are burned;  
(3) Have the BP contractors carrying out the burn operations been informed of the protocol and have they agreed to provide NOAA's biologists with the necessary time and access to proposed burn areas to accomplish their assignments.

Also, are these details regarding turtles correct: (1) with the support of the Unified Joint Command, NOAA is putting biological observers on the burn boats on an experimental basis; and (2) NOAA has contracted with 20 boat captains to help biologists with sea turtle rescue operations (increased from 6).

We will need these answers by the end of the day.

Thank you,  
Deb

Samuel Rauch wrote:

Can we get answers to these questions

----- Original Message -----

Subject: Re: More questions/ concerns on sea turtles  
Date: Fri, 25 Jun 2010 16:07:20 -0400  
From: Eric Schwaab <Eric.Schwaab@noaa.gov>  
To: 'kostyack@nwf.org' <kostyack@nwf.org>  
CC: 'samuel.rauch@noaa.gov' <Samuel.Rauch@noaa.gov>

John - in #2, my understanding is that these are not 20 boat captains, but 20 people to conduct independent search and rescue of turtles. I am copying this to Sam Rauch who can direct this to the right people to confirm staffing issues and to address protocol questions. Thanks.

-----  
\*From\*: John Kostyack <kostyack@nwf.org>  
\*To\*: Schwaab, Eric <Eric.Schwaab@noaa.gov>  
\*Sent\*: Fri Jun 25 15:55:13 2010  
\*Subject\*: More questions/ concerns on sea turtles

Hi Eric-

Thanks for the taking the time to speak with me on the phone yesterday. As we discussed, the reports of BP carrying out burn operations in areas where turtles are known are extremely worrisome. I have since consulted with a number of NWF colleagues as well as various sea turtle experts and everyone is grateful that NOAA is taking action in response to these reports. However, questions still remain about whether the burning of turtles may be continuing.

My understanding is that NOAA is doing two things to address this issue: (1) with the support of the Unified Joint Command, you are putting biological observers on the burn boats on an experimental basis; and (2) you have contracted with 20 boat captains to help biologists with sea turtle rescue operations (increased from 6). (Please let me know if I got any of these details wrong.)

Here the questions that have arisen as I have passed this report to colleagues:

- (1) Has NOAA developed a protocol giving direction to its biologists (both those on BP burn boats and those on NOAA boats) on how they will find and rescue turtles in planned burn areas;
- (2) If so, are there enough trained biologists to carry out this protocol and ensure that no turtles are burned;
- (3) Have the BP contractors carrying out the burn operations been informed of the protocol and have they agreed to provide NOAA's biologists with the necessary time and access to proposed burn areas to accomplish their assignments.

Thanks in advance for your help with this. Please let me know what NWF can do to assist you.

John

John Kostyack

Executive Director, Wildlife Conservation  
and Global Warming

901 E Street, N.W., Suite 401

Washington, DC 20004

office: (202) 797-6879

cell: (202) 360-7481

[kostyack@nwf.org](mailto:kostyack@nwf.org)

twitter: @kostyack

Global Warming Safeguards:  
Safeguarding Nature for People and Wildlife

<http://www.nwf.org/globalwarming>

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Debra Lambert  
Office of the Assistant Administrator  
NOAA Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910

Phone: (301) 713-2239 x206 Email: [deb.lambert@noaa.gov](mailto:deb.lambert@noaa.gov)

**NWFresponse6.28.2010 edits.doc**

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**Content-Encoding:** base64

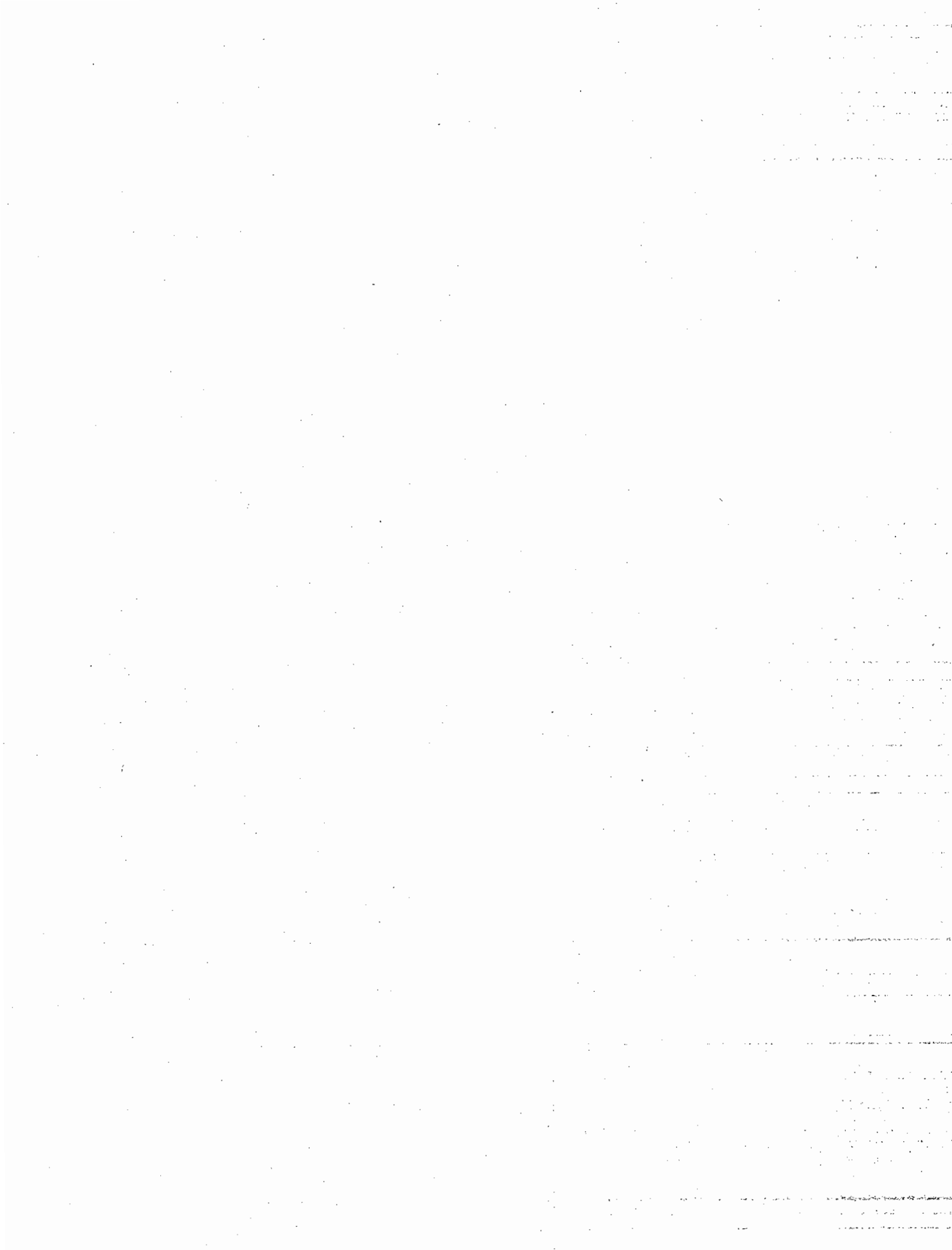
## MARINE ANIMAL HISTOLOGY REQUEST

Submitter: ☐ C. Woodley ☐ Stacey ☒ Rolstein ☐ Burek  
 Sample Category: ☐ Coral ☐ Turtle ☒ Marine Mammal ☐ Other  
 Project: do not mix projects ☐ JME ☐ Die-off ☐ Stranding ☐ Prescott: ☐ Name of Project  
 Billing: ☒ NOAA ☐ Other (please enter info)  Name   
 Address  Address  City  State  Zip Code   
 Phone Number  Phone Number   
 STATUS: ☐ RUSH/PRIORITY ☒ ROUTINE ☐ RESEARCH  
 Laboratory: ☐ HCS ☒ EM An. ☐ Date Sent  Date Received (lab)  Date Completed   
 LABORATORY ACCESSION/INVOICE NUMBER  Total Cost \$  Payment Received ☐ Completed By

\*PLEASE PUT IN THE TOTAL NUMBER OF SLIDES REQUESTED FOR EACH CATEGORY REQUESTED & LEAVE BLANK ALL OTHER CATEGORIES.

\*SS = SPECIAL STAINSMOMENT/SPECIAL REQUESTS. LABORATORIES-Please indicate in the lower box if the number of slides differ; indicate in the comments about any changes or problems with processing cassettes.

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Specials-Plastic	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
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Frozen	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
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HE-Mega	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Discovery Services	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
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Decal: Formic EDTA Rapid	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
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Silver SS	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Stain Requested*	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Non-Silver SS	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
HE-Miami	<div>20</div>	<div>22</div>	<div>21</div>	<div>16</div>	<div>11</div>	<div>27</div>
HE-HCS	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Accession Number & Field ID	ECWR62310- 13/10-245C	GW201007A /10-244C	GW201008A /10-243C	LA27/10-250 C	MCT201052 4/10-249C	61MMS0619 10/10-241C



Cost \$											
TEM											
Stain Requested*											
Specials-Plastic											
Plastic											
Diagn Path											
Frozen											
Decal-Mega-Miami											
HE-Mega											
Discovery Services											
Immuno Requested*											
Immunohisto											
Decal											
Stain Requested*											
Silver SS											
Stain Requested*											
Non-Silver SS											
HCS-Miami	29	11	18	1	1	1	1	1	1	1	182
HE-HCS											
Accession Number & Field ID	64IMM50619 10/10-240C	MCT201005 29/10-239C	MCT201006/ 10-238C	R3100517-0 1/10-151	R3100517-0 2/10-152C	R3100517-0 3/10-153C	R300517-04/ 10-154C	R3100516-0 1/10-150C	R3100515-0 1/10-148C	R3100519-0 2/10-149C	TOTAL





Comments by  
Submitter

1. All blocks and slides must be sent back together.
2. Please fill out the subsampling chain of custody form.
3. Please seal the shipping box with tape with the date and your name and signature written on it.

Comments by  
Laboratory

Date Slides Rcvd

Received By

\_\_\_\_\_



**Subject:** RE: Document Request

**From:** "Seekins, Brian MST1" <Brian.W.Seekins@uscg.mil>

**Date:** Sun, 04 Jul 2010 14:32:29 -0700

**To:** Alexis.Gutierrez@noaa.gov

Just you

-----Original Message-----

From: Alexis.Gutierrez@noaa.gov [mailto:Alexis.Gutierrez@noaa.gov]

Sent: Sunday, July 04, 2010 3:50 PM

To: Seekins, Brian MST1

Subject: Re: Document Request

Thanks! Did you just want this to go to me or was it supposed to have a broader distribution? Thanks, A

Seekins, Brian MST1 wrote:

From the burn unit

-----Original Message-----

From: Alexis.Gutierrez@noaa.gov [mailto:Alexis.Gutierrez@noaa.gov]

Sent: Sunday, July 04, 2010 10:24 AM

To: Gelakoska, Marianne LCDR; firemandrew876@gmail.com; William Whitmore; Ed Levine; John Carlson; Seekins, Brian MST1

Subject: Document Request

Hi Marianne and Company,

Sorry we didn't get these to you earlier. We had another fire drill pop up (which Ed and Will we need to talk to you about that too).

Included in this email you will find --

- 1.) Observer Equipment List
  - 2.) In-situ Burn Team Training Ppt (in 2nd email)
  - 3.) Observer protocol
  - 4.) Marine Observer Form
  - 5.) Marine Documentation Form
  - 6.) BMPs for Sea Turtles
  - 7.) Observer Company -- East Coast Observers, Owner is Trish Bargo.
- Trish can be reached at [tbargo@eastcoastobservers.com](mailto:tbargo@eastcoastobservers.com).

PLEASE NOTE -- That the BMPs is the last version we saw before we understand it went to Area to be incorporated with all the BMPs. Will can you confirm this is the final document? Can you let us know when Area will be distributing all the final BMPs via ERMA?

Thank you!! A

**Subject:** Re: Burn Units on Standby

**From:** "Barbara.Schroeder" <Barbara.Schroeder@noaa.gov>

**Date:** Mon, 05 Jul 2010 13:19:58 -0400

**To:** Alexis Gutierrez <Alexis.Gutierrez@noaa.gov>

because of weather?

Alexis Gutierrez wrote:

Hi! We are hearing the burn-units are on the standby and possibly coming in before even getting on station. We should hear in the next 30-60 minutes what the decision would be, but in the in-term lets hold on a press releases. Thanks,  
A

UNIFIED AREA COMMAND

TURTLE OBSERVER TRAINING PROGRAM

RESPONSES TO PLAINTIFF'S CONCERNS

1) Who is training the observers?

Training provided by: East Coast Observers, Inc.

POC: Trish Bargo, President  
East Coast Observers, Inc.  
787 W. 49th St.  
Norfolk, VA 23508  
(757) 880-7636 mobile  
(757) 965-6766 fax

2) Is the training standardized or ad hoc?

The training is standardized.

3) Will there be observers on each team?

The concept of operations for in-situ burns (ISBs) is to implement the best management practices (BMPs) as weather conditions and operational constraints allow. Where ISBs are contemplated, trained observers will be placed on the igniter boats and conduct their observations in accordance with the BMPs and observer protocols. The igniter boats work in coordination with the other vessels that are corralling the oil to be burned.

4) Certain experts and academics were not consulted prior to the Unified Area Command (UAC) initiating ISB operations. Why not?

Since the disaster on April 20<sup>th</sup>, the U.S. Coast Guard, and subsequently the partner organizations in the Unified Area Command, have all been working in an emergency operations mode. The UAC is still engaged in an emergency operations mode. The U.S. Coast Guard, as the lead government agency in the UAC, has been relying on our sister agencies, National Oceanic and Atmospheric Administration (NOAA), and U.S. Fish and Wildlife Service (FWS), to provide the knowledge and expertise to assist in minimizing the risk of adverse impact on endangered species as a result of operations being conducted during this emergency response period. Both NOAA

and FWS are the lead agencies for endangered species management and as they are participants in the Unified Area Command, the U.S. Coast Guard routinely consults with those agencies as required under Section 7 of the Endangered Species Act (ESA).

While we regret not having had the opportunity to fully engage marine wildlife experts in the academic community, the U.S. Coast Guard and our partners in the Unified Area Command are committed to minimizing the risk of adverse impact to endangered species while also implementing the most effective oil spill response possible. There has been at least one conference where concerns were discussed and the U.S. Coast Guard and the UAC invite future opportunities to further discuss issues raised by experts in the academic community.

- 5) Will the observers be properly equipped to rescue any turtles that might be encountered during in-situ burn operations?

Attached is a list of equipment issued to the observers to assist in spotting and rescuing turtles if any are encountered.

- 6) There are several private and non-profit groups dedicated to helping to protect endangered turtles. These groups have many members willing to volunteer their time and efforts to assist in minimizing the risk of harm to endangered turtles. Why has the Unified Area Command not engaged and used these volunteers?

The UAC has established already established avenues of communications for those who wish to volunteer.

If you or someone you know is interested in volunteering, please call the Deepwater Horizon Response Volunteer Request Line at 1-866-448-5816 or visit the Web sites below.

State specific volunteer opportunities:

Louisiana: <http://www.volunteerlouisiana.gov/>  
Mississippi: <http://www.volunteermississippi.org/1800Vol/OpenIndexAction.do>  
Florida: <http://www.volunteerfloridadisaster.org/>  
Alabama: <http://www.servealabama.gov/2010/default.aspx>

Volunteer Hotlines:

Report oiled shoreline or request volunteer information:  
(866)-448-5816

Submit your vessel as a vessel of opportunity skimming system:  
(866) 279-7983 or (877) 847-7470

See also:

<http://www.deepwaterhorizonresponse.com/go/doc/2931/677375/>

- 7) Can the UAC provide more detailed information on any turtle encounters that occur during in-situ burn operations?

The U.S. Coast Guard, along with their partners at the Unified Area Command, which includes BP, is currently examining internal data collection and dissemination processes to determine exactly how such information can be made more readily accessible to the general public.

- 8) Plaintiffs have raised some concern with the use of spotter aircraft and the proper aircraft and altitudes for such flights.

The Unified Area Command is continuing to gather information regarding aerial wildlife spotter flights, the altitudes at which they fly, and the types of aircraft that are used, and the length of time that they fly, and will share this information with the plaintiffs in the near future.

BEST MANAGEMENT PRACTICES  
TO PROTECT SEA TURTLES AND MARINE MAMMALS DURING  
IN-SITU BURNING OPERATIONS FOR THE  
DEEPWATER HORIZON (MC 252) OIL SPILL RESPONSE

Approved by the Area Unified Command

USCG

RADM J. Watson (FOSC) / RDML R. Nash (DFOSC)

*J. Watson*

7-4-10

date

BP

Mr. D. Suttles

*Doug Suttles*

7-4-10

date

TOI

Mr. A. Rose

*COMCMA*

7-4-10

date

BOEM

Mr. L. Herbst

*Michael Brundage*  
for Lars Herbst

7/4/10

date

LA

Mr. D. Bradshaw

*J. D. Bradshaw* for

7/4/2010

date



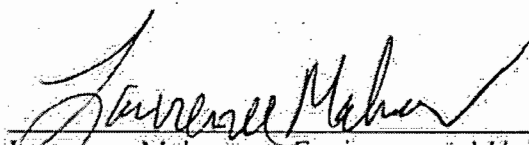
TO: Area Unified Command

FROM: Environmental Unit, Area Command

SUBJECT: Best Management Practices During In-Situ Burn Operations for Sea Turtles and Marine Mammals

The following documents detail the Best Management Practices (BMPs) for sea turtles and marine mammals with regards to in-situ burning operations for the Deepwater Horizon (MC-252) response. Guidance to response personnel is offered for skimming and in-situ burn operations and protocols for field observers are also provided. Due to area, environmental, and situational differences amongst the unique operation areas, we recommend that the Environmental Units in the incident commands reserve the authority to amend these BMPs as they deem necessary, and have them approved by their respective commands. These documents have been reviewed and approved by the Area Command Environmental Unit:

1. Best Management Practices to Protect Sea Turtles and Marine Mammals
2. Sea Turtle At-Sea Retrieval Protocol
3. In-Situ Burn Sea Turtle Observer Protocol
4. Instructions for Completing the Marine Species Observation Form
5. Marine Species Observation Form

  
Lawrence Malnor Environmental Unit Leader - BP

7/4/10  
date

  
William Whitmore Environmental Unit Leader - NOAA

7/4/10  
date

**BEST MANAGEMENT PRACTICES TO PROTECT  
SEA TURTLES AND MARINE MAMMALS  
(In-Situ Burn Operations)**

*Sea Turtles*

- Sea turtles can be adversely affected during corralling of oil and oiled Sargassum or other converged material by being herded by the booms into oil. Turtles may also be in the oil already whether or not there is Sargassum present. The concern with in-situ burning is that any live turtles in the boomed oil and/or oiled Sargassum or other converged material could potentially be burned when the oil is ignited.

*Best Management Practices to Reduce In-Situ Burns Impacts to Sea Turtles*

- Collection of all live and dead turtles needs to be conducted according to the "Sea Turtle At-Sea Retrieval Protocol" document
- The best possible mitigation measure would be to have turtle rescue vessels (with trained rescue personnel, if available) accompany the burn taskforce into the burn box and to search all material to rescue turtles prior to burning, while oil is being boomed or otherwise is awaiting burning. If this is not possible then the following should be considered:
  - Send turtle rescue vessels (with trained rescue personnel, if available) into the next day's projected burn box to search for and rescue turtles. Feasibility will depend on the size of the projected area and whether material has already been boomed or otherwise collected.
  - Have a trained observer (if available) or a crew member dedicated to looking for sea turtles (and marine mammals) during corralling operations and record each sighting event, including GPS location, species (if known), description of encounter on the attached form (attachment 2).
  - Contact the Wildlife Hotline (866-557-1401) or your supervisor to report the turtle to the Wildlife Branch immediately.
  - If possible all Sargassum that is not-oiled or is only very lightly oiled should be avoided.
  - If possible a survey should be conducted in the burn area after the burn is complete and all dead sea turtles should be counted and if possible collected.

*Marine Mammals*

- Marine mammals can be adversely affected by in-situ burns if they are in the burn area during burning. It is expected that marine mammals will avoid the area once the oil is ignited.

*Best Management Practices to Reduce In-Situ Burns Impacts to Marine Mammals*

- Have a trained observer, if available, or a crew member dedicated to looking for marine mammals that may be affected by the burn or are impacted by oil.
- Contact the Wildlife Hotline (866-557-1401) or your supervisor to report any marine mammal that is impacted by burn operations or that has signs of oil impacts to the Wildlife Branch as quickly as possible.

- If possible avoid burn operations where marine mammals have been spotted, if a marine mammal is spotted during operations, if possible, stop operations until the animal is outside the operations area.

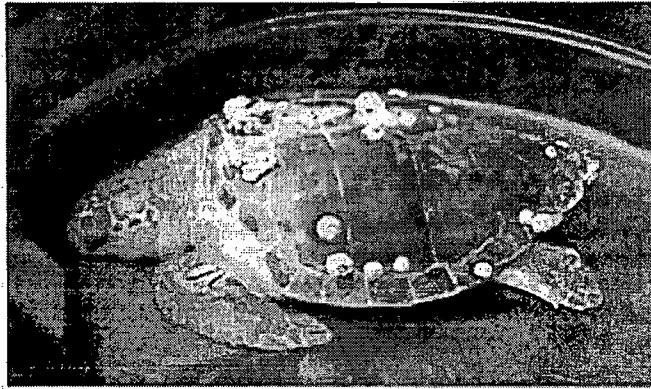
## SEA TURTLE AT-SEA RETRIEVAL PROTOCOL

All live and dead sea turtles (includes oiled turtles) should be recorded and retrieved (if possible) and taken to an onshore facility for cleaning and rehabilitation or salvage/necropsy. Animals can be netted at the surface using dipnets or other hoists. Once onboard, sea turtles need to be carefully handled and transported to shore as soon as possible, in accordance with NMFS guidance.

**BE SURE TO USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT**  
(Gloves, Tyvek suits, boots, and goggles if necessary)

Sea Turtle Retrieval Kit (1 per boat) Includes:

- Large Diameter dip net
- Large Rubbermaid Crate
- Large Cotton Towel
- PPE (Gloves, Tyvek, goggles)



1. Bring turtle on board (dipnets are useful for small turtles less than ~3 ft length). Do not pick up turtles by their flippers, but rather, lift them by grasping both sides of the carapace. If the turtle attempts to evade capture, do not pursue. When handling turtles, be aware of the head and flippers – they will bite and have powerful flippers with claws.
2. Determine position at sea (latitude/longitude coordinates as DD.DDDD).
3. Contact the Wildlife Hotline (866-557-1401) or your supervisor to report the turtle to the Wildlife Branch as quickly as possible.
4. Get the towel wet and put it in the bottom of the transport crate. Place the turtle on top of the towel. Put the crate with the turtle inside in the shade. Do not add more water to the crate.
5. If the turtle appears to be dead, follow the same process but roll the towel up to raise the hind end a few inches higher than the head. Keep the crate in the shade. (Note: live turtles may appear comatose for up to 24 hours!)
6. Deliver the sea turtle (live or dead) to the designated Response Center. Transport turtles in individual containers when possible. Be sure to provide location, date and time data, and a chain of custody form with each turtle.

## **IN-SITU BURN SEA TURTLE OBSERVER PROTOCOL**

(subject to refinement and change as more data is gathered)

The observer will be stationed on the ignition boat and conduct the survey from a position that optimizes visibility. A general header data collection sheet will be filled out by the observer that includes information on the time survey begins, location, sea state, a general description of the oil and habitat, and unique information to track the survey data.

A sea turtle survey includes monitoring of 3 areas prior to the burn including; the area in front of the trawlers, oil concentrated in the boom, and any oil trailing behind the boom. As part of the survey, observers will note the type of oil encountered during the survey, the type of habitat (e.g. sea weed or other aquatic vegetation) encountered during the survey. A powerpoint for trainees explains in greater detail.

Sea turtles encountered during the survey that can be removed from the oil will be captured with a dip net. The sea turtle will be boarded and the observer will provide a cursory assessment of its status. Data relative to condition, location, and survey phase will be recorded. Sea turtles will be placed in a confined area/container and covered with a wet towel to minimize stress if the animal is alive. The sea turtle will be transported to the support vessel and the observer will notify the support vessel to arrange transport the sea turtle back to land.

## INSTRUCTIONS FOR COMPLETING THE MARINE SPECIES OBSERVATION FORM

The Marine Species Observation Form has been developed to document information pertaining to the sightings and retrieval of marine species during at-sea operations. The data forms are to be completed by the observer during each dedicated survey. The form will be used for all marine operations involving visual observers. In the event that a field is not applicable indicate this by writing "N/A". In the event that information is unobtainable or unknown write "UK" in the corresponding field and describe the circumstances in the comment section of the data form.

**Animals Sighted:** Circle yes or no to indicate if any animals were sighted during surveys associated with marine operations.

**Animals Retrieved:** Circle yes or no to indicate if any animals were retrieved during the course of the marine operation.

**Observer #:** This is a unique number assigned to each observer by the contractor, e.g. C45

**Page \_\_\_\_ of \_\_\_\_:** This field is used link all documents associated with each marine operation. Pages should be numbered consecutively and arranged in the order that sightings or retrievals occur during each survey.

**Trip #:** Trip numbers will be three digit numbers designated by the number of trips the observer has completed as part of this program. For example observer C45's first trip will be 001, the second trip will be 002 and so forth.

**Survey #:** This is a three digit number assigned by the observer on a trip basis for each of the surveys completed during a trip. A survey is an observation event focused on a single marine effort such as surface skimming or surface burning.

**Date:** Enter the date that the survey is commenced.

**Vessel Name:** Indicate the name of the vessel from which observations are being completed.

**Type:** Indicate the type of vessel from which the observations are being completed.

**Location:** The fields contained in this section of the data form will capture the start and end position and time relative to the survey platform in which the observer is completing the visual observation and species retrieval. Additional elements such as general location, qualitative description of the oil and habitat type will also be recorded by checking the most appropriate box.

**Length of Boom:** Recorded in feet this figure should be obtained by asking the Captains of the vessels towing the boom or from the burn team.

**Skirt Height:** Recorded in inches this field should be obtained from the Captains of the vessels towing the boom or from the burn team.

**Start Burn Time:** Using the 24hour clock format record the time that the burn is initiated by the burn team.

**Weather Description:** Indicate one of the following weather conditions: unknown, clear, partly cloudy, continuous layer of clouds, drizzle, rain, showers, thunderstorms, rain and fog, fog or thick haze, or other with a description in the comments section.

**Visibility:** Estimate in feet the distance of clear visibility across the survey area.

**Sea State:** Using the Beaufort scale describe the sea state present during the survey.

**Animal Observation Summary:** This section is used to summarize the condition of each type of animal encountered during a survey.

**Sighting and Retrieval-Additional Information:** This section is used to log each specimen encountered during the survey.

**Spec. #:** Indicate the three digit specimen number assigned by the observer on a per survey basis for each animal sighted and/or retrieved during the survey.

**Species:** Indicate the common name of the species sighted and/or retrieved.

**Condition:** Note whether the animal was alive "A", deceased "D", or unknown "UK" upon sighting and separated by a hyphen whether the animal was retrieved "R" or stayed "S" at sea. For example if a live animal is encountered and it is retrieved the observer would indicate A-R in the condition field. If the animal is not retrieved and stays at sea the observer must use the comment section to describe the circumstances for leaving the animal at sea.

**Photos:** Indicate with a "Y" or "N" if digital images of the specimen were taken.

**Latitude and Longitude:** Using the format of DD.MM.mmm indicate the position of the vessel when the animal is retrieved. In the event that an animal is not retrieved indicate the position of the survey vessel, approximate the distance to the animal in feet and indicate the information in the comment section.

**Survey phase:** Indicate one of the following:

1. survey of material in front of trawlers
2. survey of material in boomed area
3. survey of material trawling behind boom

**Comments:** Indicate with a "Y" or a "N" whether comments have been included pertaining to the specimen.

**Comments:** This section should be used to document all observed interactions between animals and gear, list key identification characteristics, to describe behavioral characteristics and any other notable information pertaining to the survey. All information relative to a specimen should be identified by the specimen number.

**Specimen Delivery Information:** This section is used to document the chain of custody for all specimens that are either transferred at sea or delivered to a shore based facility.

**Date Specimen Delivered:** Indicate the data that the specimen was transferred or delivered (mm/dd/yy).

**Vessel/Organization Name:** Indicate the name of the vessel or organization that receives the specimen.

**Name of Receiving Individual:** Indicate the name of the individual that takes possession of the specimen.



The information contained herein is confidential and should be submitted to NOAA Resources at Risk Environmental Unit at [nmfs.ser.emergency.consult@noaa.gov](mailto:nmfs.ser.emergency.consult@noaa.gov)

<b>MARINE SPECIES OBSERVATION FORM</b>		ANIMALS SIGHTED: Y OR N
		ANIMALS RETRIEVED: Y OR N
OBSERVER #:	PAGE ____ OF ____	
TRIP #:	DATE (MM/DD/YY):	
SURVEY #:	SKIMMER TYPE:	
OBSERVATION PLATFORM:		
<b>LOCATION</b>		
	START LAT/LONG (DD.MM.mmm)	START TIME(24hr)
	END LAT/LONG (DD.MM.mmm)	END TIME(24hr)
SOURCE <input type="checkbox"/> NON-SOURCE <input type="checkbox"/> NEAR SHORE <input type="checkbox"/> BEACH <input type="checkbox"/>		
<b>TARGET OIL</b>		<b>HABITAT TYPES</b>
HEAVY(dark black/brown) <input type="checkbox"/>	SARGASSUM WEEDLINE: OIL <input type="checkbox"/> NO OIL <input type="checkbox"/> OIL LINE NO SARGASSUM <input type="checkbox"/>	
MEDIUM (brown to peanut color) <input type="checkbox"/>	DISPERSED SARGASSUM: OIL <input type="checkbox"/> NO OIL <input type="checkbox"/> OTHER:	
LIGHT (silver/rainbow sheen, metallic brn) <input type="checkbox"/>	HEAVY CONTINUOUS OIL NO SARGASSUM <input type="checkbox"/>	
Emulsified (orange) <input type="checkbox"/>	DISPERSED PATCHES OF OIL NO SARGASSUM <input type="checkbox"/>	
LENGTH OF BOOM (FT):		SKIRT HIEGHT (INCHES):
START BURN TIME (24hr):	WEATHER DESCRIPTION	VISIBILITY (FT):
		SEA STATE:

## ANIMAL OBSERVATION SUMMARY

ANIMAL TYPE	NUMBER OF ANIMALS	
	ALIVE	DECEASED
Sea turtles		
Dolphins		
Whales		
Manatees		
Sea birds		
Other (Specify):		

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## SIGHTING AND RETRIEVALS- ADDITIONAL INFORMATION

[illegible]

**COMMENTS** (Describe any interactions with equipment, species identification characteristics, behavioral characteristics, ect.):

This image shows a single, mostly blank page from a document. There are very faint, illegible horizontal lines across the page, which appear to be either extremely faded text or ghosting from the reverse side. The paper has a slightly off-white or cream color. No distinct figures, tables, or other graphical elements are visible.

## SPECIMEN DELIVERY INFORMATION

Date Speciment Delivered	Vessel/Organization Name	Name of Individual Receiving

Report on Deepwater Horizon burn unit operations, 6/21/10.

The goal of the trip was to observe burn unit operations, determine the likelihood of sea turtle mortality associated with surface burning activities, and assess the possibility of putting sea turtle observers with the burn unit.

Arrived on scene approx. 5 miles northeast of the Deepwater Horizon accident site at approx. 1445 hours on 6/21/10. Two burns were in progress. We observed our first burn from the crew boat *Gulf Storm*. We arrived just as the burn was ignited. Conditions were light chop and winds 7-10 knots. I was not able to survey the area prior to ignition of the first fire. The oil in the area adjacent to the crew boat was heavy oil with a small amount of widely dispersed sargassum. Large continuous areas of oil were randomly distributed around the area. In general, there was no definable pattern to the oil and no weedline present. This was the pattern I saw during the rest of the day: widely dispersed small patches of sargassum with no definable weedline.

In general, two shrimp trawlers were used to pull a boom to concentrate oil for burning. The trawlers appeared to be approx. 300-500' apart while towing the boom. The boom is 500' in length and the tow cables are 300-500'. The boom skirt drops down in the water column approx. 2.5-3 ft. The trawlers were moving forward at approx. 1/2 knot prior to and during the burn. I was told if the trawlers move too quickly, the oil goes under the bottom of the boom and is not available for the burn. If a fire is in progress, the boom will overrun the fire and put it out. The oil is ignited with a package of 2 1/2 gallon plastic jugs of diesel fuel and a flare. Once the ignition package is placed inside the boom in the concentrated oil, it takes 2-3 minutes to ignite the oil. The fire starts fairly small (10 m) diameter area and builds to an area of 30 m diameter in approx. 3 minutes. I was told by the burn teams that they do not burn the orange emulsified oil. They target the heavy brown material. I monitored the first fire for approx. 5-7 minutes but was not close enough to survey for turtles.

Following the first burn, I transferred to one of the support vessels (Fox Sea) and was quickly put on one of the ignition boats. I monitored 2 burns from the ignition boat. Conditions were calm seas, 7-10 knot winds. We surveyed the area in front of the trawlers prior to ignition and found patches of heavy oil and widely scattered sargassum. The sargassum formed no pattern and there was not a definable weedline. I did not observe any turtles in the oil or sargassum in the path of the boom. We surveyed the boomed oil for sea turtles by running along the length of the u-shaped boom at a close distance (3-10 ft). I stood on the raised foredeck of the ignition boat during the survey. A small amount of sargassum was seen at the apex of the boom. In the second fire, the sargassum and oil could be seen rolling under the boom as it moved slowly forward. I felt confident that I could survey the entire area of heavy oil in the boom prior to ignition. I did not see any turtles in the boomed area on either fire. The boomed area contained material similar to what we observed previously in the turtle capture efforts including coconuts, pieces of marsh wrack, sargassum and driftwood. If turtles were seen in the boomed material, it would be possible to capture them from the ignition boat. The chronology of the 3 fires I observed was similar with the ignition taking 2-3 minutes and

the fire slowly building over approx. 3 minutes. Some of the fires continued to burn for several hours as the trawlers moved forward collecting additional fuel (oil). Other fires were out in 15-20 minutes. Generally, the fires appeared to move fairly slowly.

We observed 2 additional booming operations that did not ultimately result in a burn. I surveyed the boomed area from the raised foredeck of the ignition boat 3-10 ft outside the boom. In these cases, the trawlers were not capturing enough oil to burn. I did not see any turtles in the boomed areas.

Burning operations were concluded at approx 1830 hours and I returned to the support boat Mister Andre for the evening. The seas increased the next day and burning operations were called off due to an approaching storm system. The boom was loaded in the morning, and we steamed back to port. The boat crews and U.S. Coast Guard personnel were very accommodating and allowed access to all aspects of the operation.

I was not able to survey the oil and sargassum from the vantage point of the shrimp trawlers due to lack of time. From the ignition boat it appeared that the shrimp trawlers were too far from the boomed material to conduct a survey for sea turtles; however, this would need to be confirmed with direct observation. Also, I was not able to survey a burned area after the fire was extinguished. Finally, my observations of the material being burned were limited to a single afternoon. Several of the crews suggested that they targeted oiled weedlines for burning when the weedlines are available.

The U.S. Coast Guard personnel indicated that they generally had 10-15 fires per day under good conditions. There are normally 5-6 teams on site. A team includes 2 boom boats (shrimp trawlers), an ignition boat, and a support vessel (crew boat).

The following are general observations from the burning operations. These observations are based on a few hours in the field with the burn crews. Additional observations will be necessary to confirm the accuracy of this report.

- 1) Burns start relatively slowly and are generally small in size.
- 2) The burn crews focus on the heavy brown oil for burning.
- 3) My impression talking with the burn crews is that they work in a relatively restricted area. It would be helpful to see a map of all burns conducted to date (their potential impact may be limited to a small area).
- 4) Pre-burn inspections for sea turtles are feasible prior to ignition.
- 5) The best platform for monitoring for sea turtles appears to be the ignition boat because of the close proximity to the material.
- 6) I was not able to survey for sea turtles from the shrimp trawlers. The possibility of using the shrimp trawlers (boom boats) as a platform for sea turtle observations should be explored.
- 7) My overall impression is that the fires start relatively slowly and are restricted to a relatively small area. The probability of mortality of free-swimming turtles is fairly low. Sea turtles mired in oil and unable to escape should be easy to spot by an observer from the ignition boat. My suggestion is to have limited observer

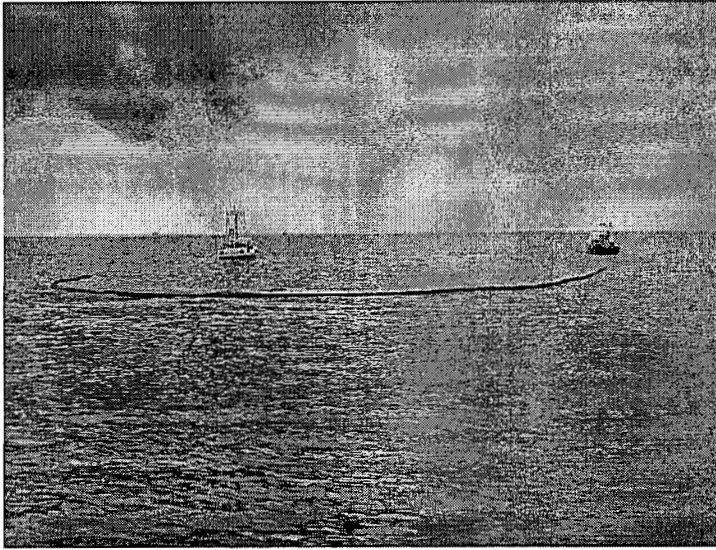
coverage on the ignition boats to continue to collect data on the type of material being burned and to monitor for sea turtles (1 ignition boat per day).

Mark Dodd  
Sea Turtle Program Coordinator  
Georgia Department of Natural Resources  
6/22/10

## Observer Protocol- Surface Burn Task Force

### General Operating

Burn operations begin at approx. 0600 hours. Paired shrimp trawlers capture oil for burning operations using a 500' boom with 300' towing cables. The boom is towed slowly at approximately  $\frac{1}{2}$  knot and forms a u-shaped configuration (see below).

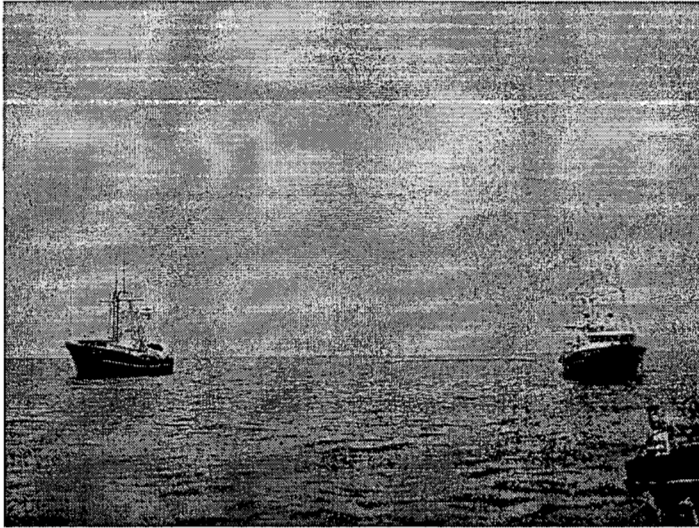


Shrimp trawlers pulling a boom to concentrate oil for surface burning operations, BP Deepwater Horizon oil spill.

The boom is periodically inspected by trawler crews and the ignition vessel to determine when a sufficient amount of fuel has accumulated for a burn. A burn is initiated when approximately half the volume of the u-shaped boom is full of oil. The personnel in the ignition boat make a final inspection of the material to confirm it is ready to be burned. Once the personnel on the ignition boat determine the material is ready for ignition, a sea turtle survey is initiated.

The sea turtle survey has 3 phases including: 1) a survey of material in front of the trawlers, 2) a survey of the material in the boomed area, and 3) a survey of material trailing behind the boom. It is necessary to survey the area in front of the trawlers because they are constantly moving forward at a  $\frac{1}{2}$  knot during the burn, and based on conditions, it may not be safe to survey the area in front of the trawlers once the fire is initiated. The area behind the boom is surveyed because the fires occasionally jump the boom and burn in an uncontained situation behind the boom.

The first phase of the survey is to characterize the material in front of the boom (e.g. oiled sargassum line, scattered sargassum and oil, scattered patches of oil with no sargassum, etc..) and to survey for sea turtles. The survey vessel (ignition boat or alternative platform) will move to a position approximately 700 m in front of the path of the trawlers and work back toward the trawlers at idle speed.

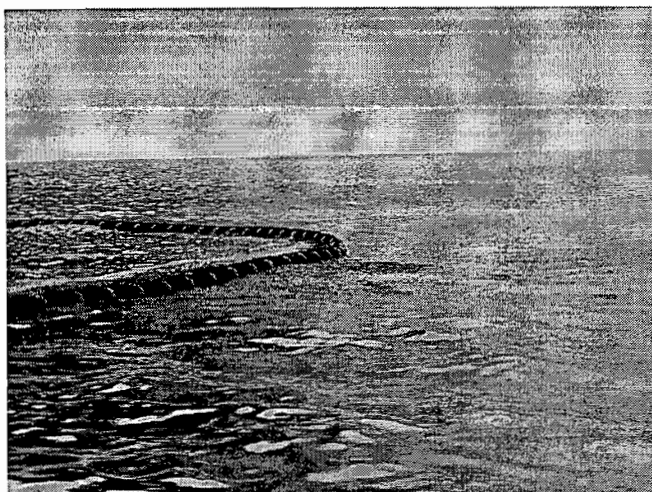


Trawlers towing boom for surface burning operations, BP Deepwater Horizon oil spill

The observer will stand on the foredeck of the survey vessel to survey for sea turtles. The pre-boom survey should continue from the point approx. 700 m from the trawlers to an imaginary line drawn between the two vessels. Once the pre-boom inspection is completed, the survey vessel will move into position for the second phase of the survey.

The purpose of the second phase is to survey the boomed material for sea turtles. The survey vessel will move to the outside of the boom and survey the entire length of the boom giving the observer a clear view of the material in the boomed area. The survey vessel will conduct the survey at idle speed as close to the boom as conditions allow (e.g. 2-5 m). The observer will stand on the foredeck of the survey vessel to survey the material inside the boom. Following the survey of the boomed material, the survey vessel will move back to the apex of the boom for phase 3 of the survey.

The purpose of phase 3 of the survey is to monitor the material that is passing under the boom. Surface fires occasionally jump the boom and burn material that has passed under and behind the boom. If during phase 2 the observer notices a significant amount of material passing under the boom that is maintaining continuity with the material in the boom, a brief survey of the material behind the boom will be conducted.

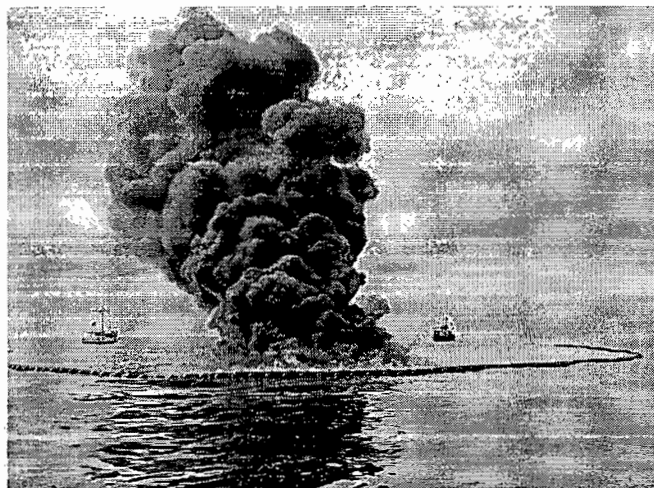


Sargassum and oil passing under the apex of the boom, BP Deepwater Horizon oil spill.

The observer will stand on the foredeck of the survey vessel to survey all the material that is maintaining continuity with the material in the boom trailing from the apex of the boom.

During all phases of the sea turtle survey observers will note the type of floating material seen in the material (e.g. driftwood, coconuts, dead wildlife, etc..).

If no sea turtles or other wildlife are seen during the 3 phases of the survey, the observer will give the ignition team the O.K. to ignite the fire.



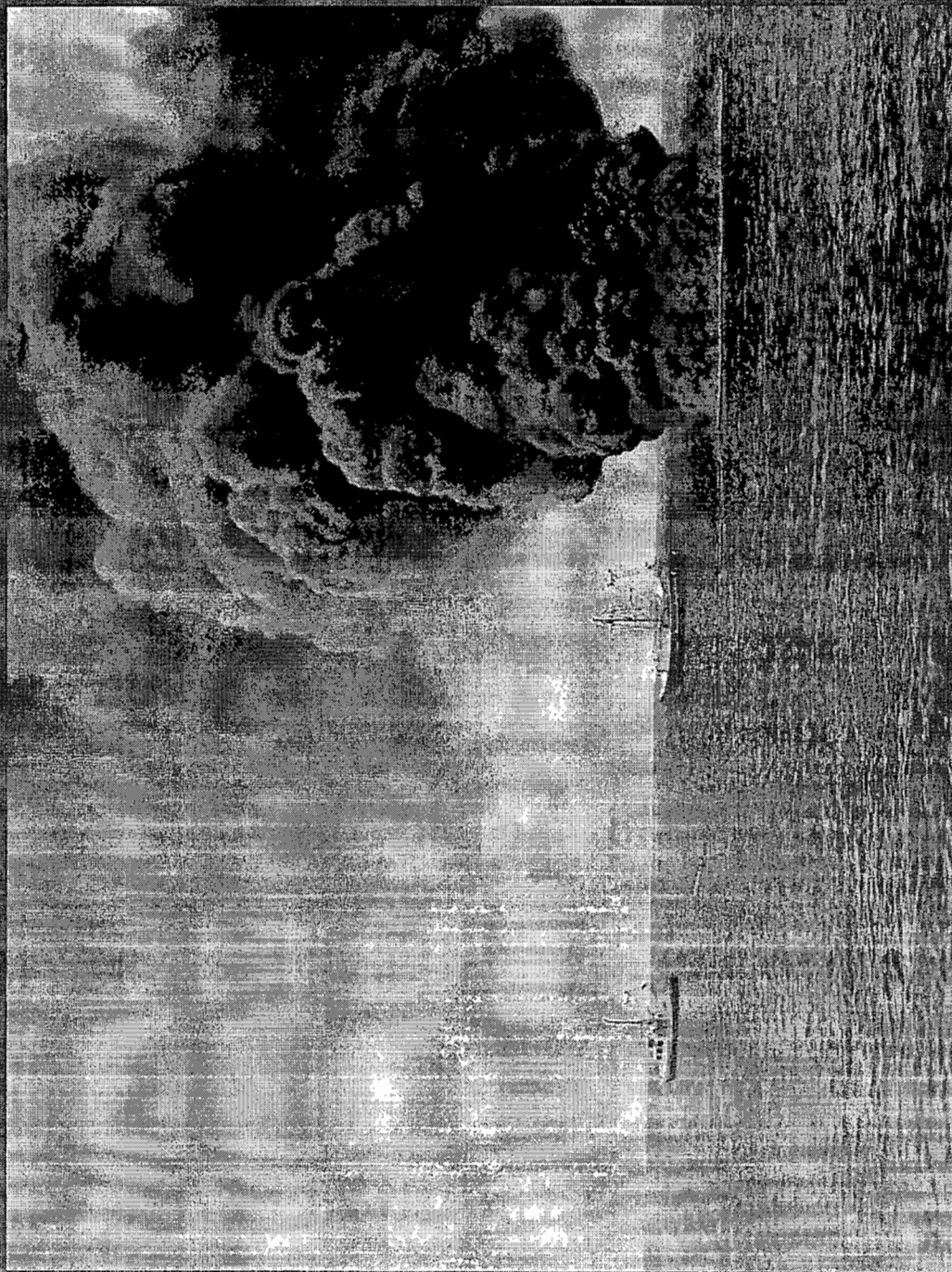
Surface burn in boomed material, BP Deepwater Horizon oil spill

If a sea turtle is seen during the pre-burn surveys, personnel on the survey vessel will attempt to capture and secure the sea turtle. Once the sea turtle has been captured or has moved out of the burn area, the observer will give the ignition team the O.K. to ignite the fire.



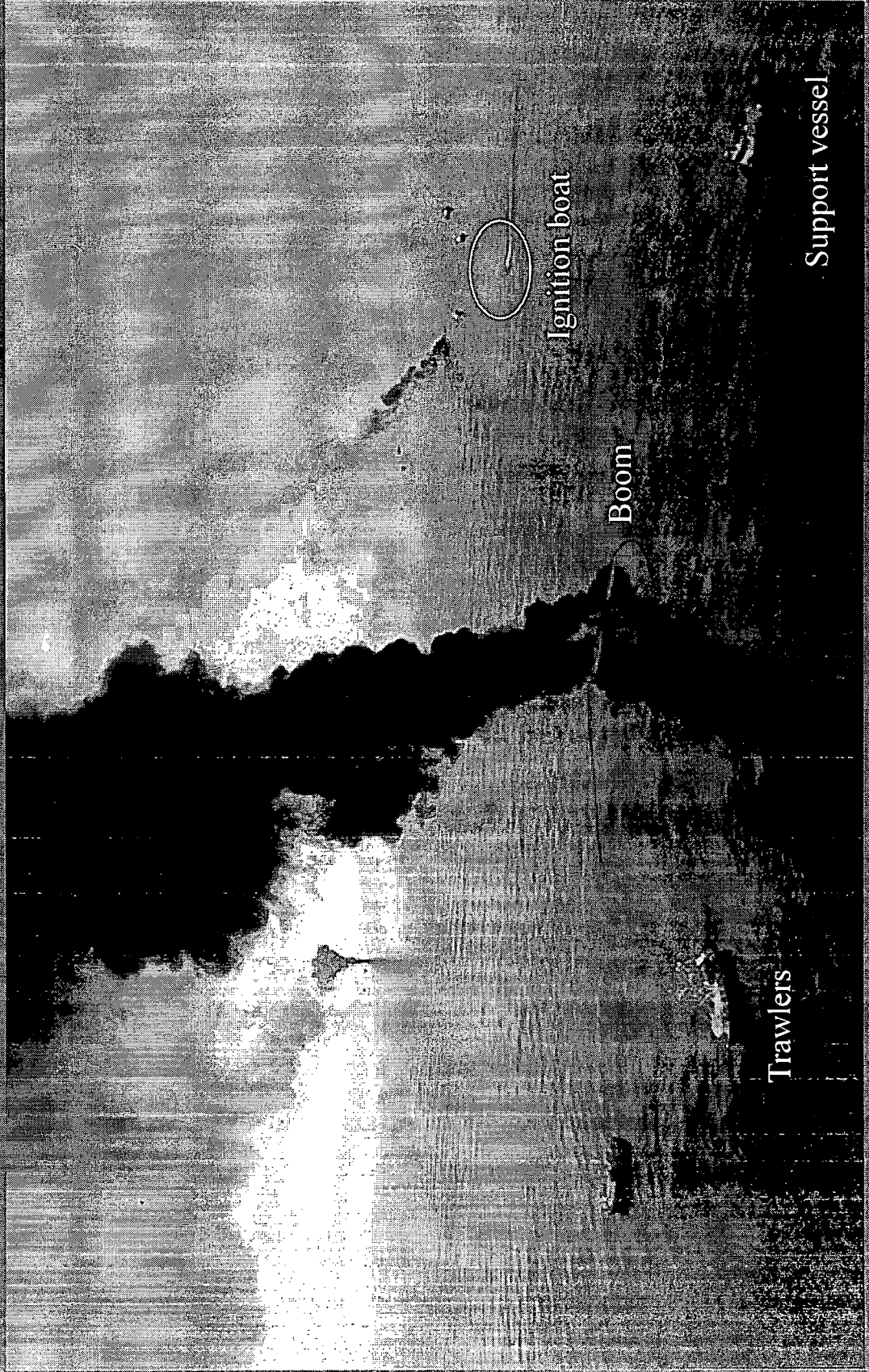
Add information on sea turtle documentation and transport here.

# In-situ Burn Team Observer Training



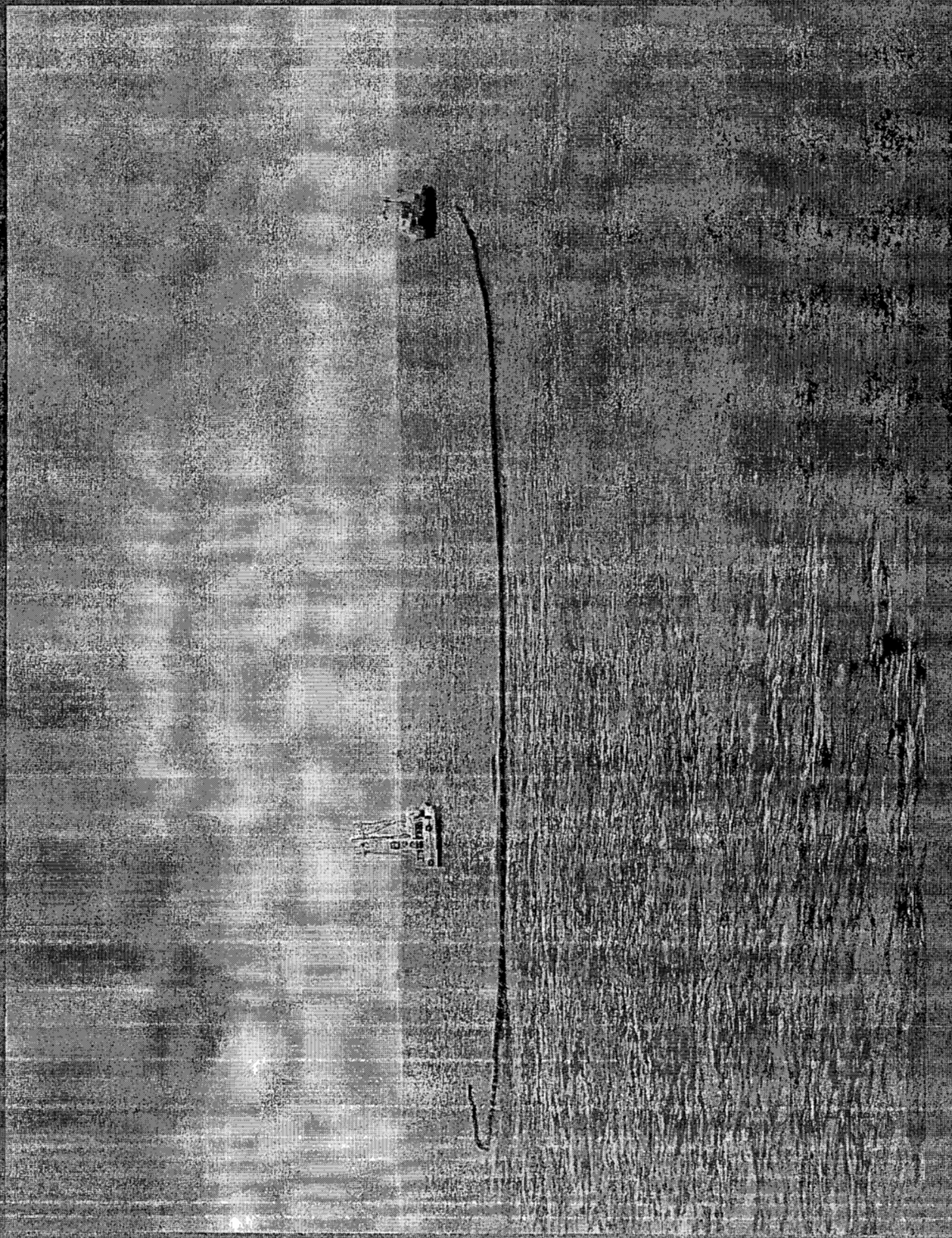
July 4, 2010

A *burn team* includes a pair of trawlers pulling a boom, an ignition boat, and a support vessel (crew boat)



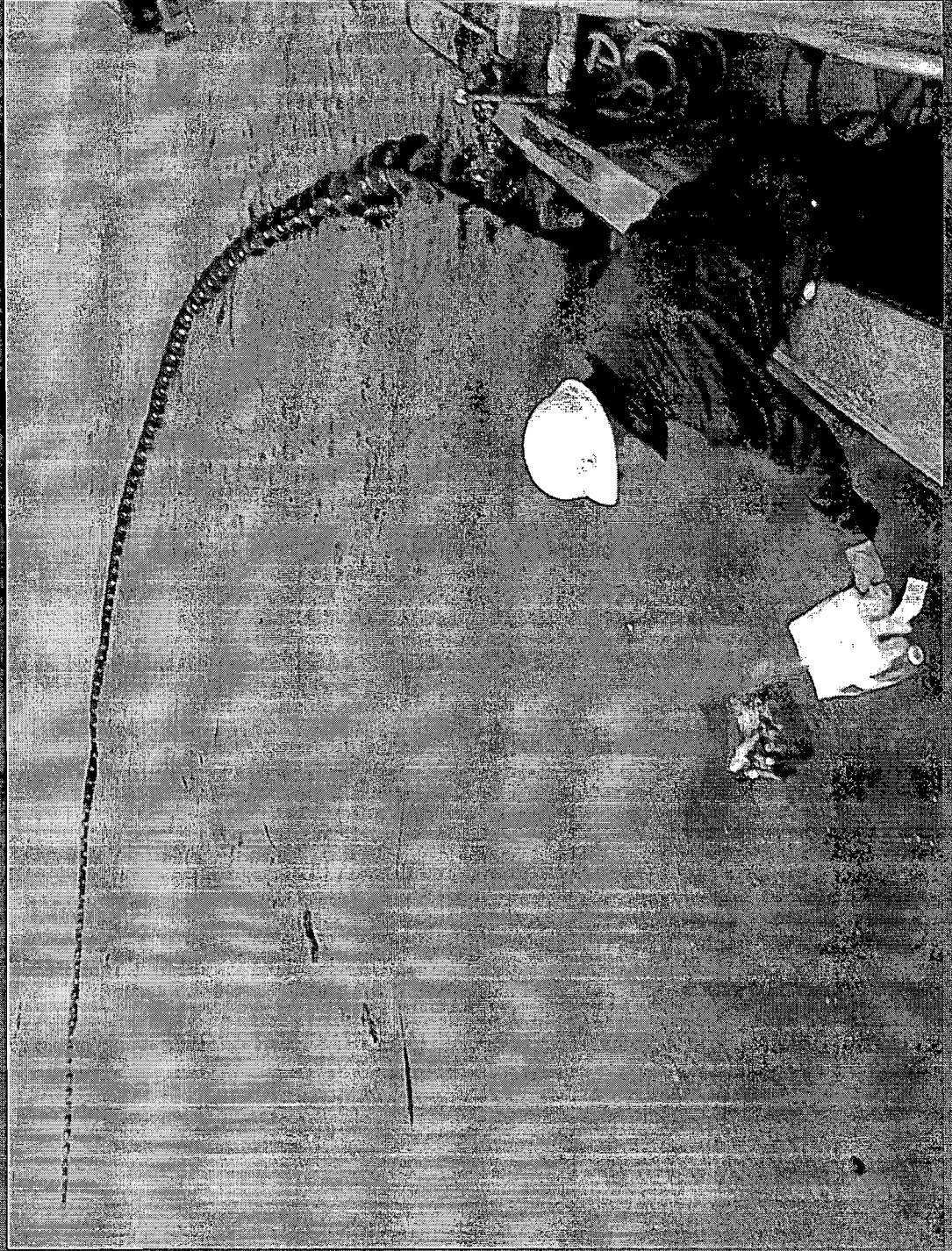


Paired trawlers pull a 500' *boom* at approx. ½ knot to concentrate oil for burning



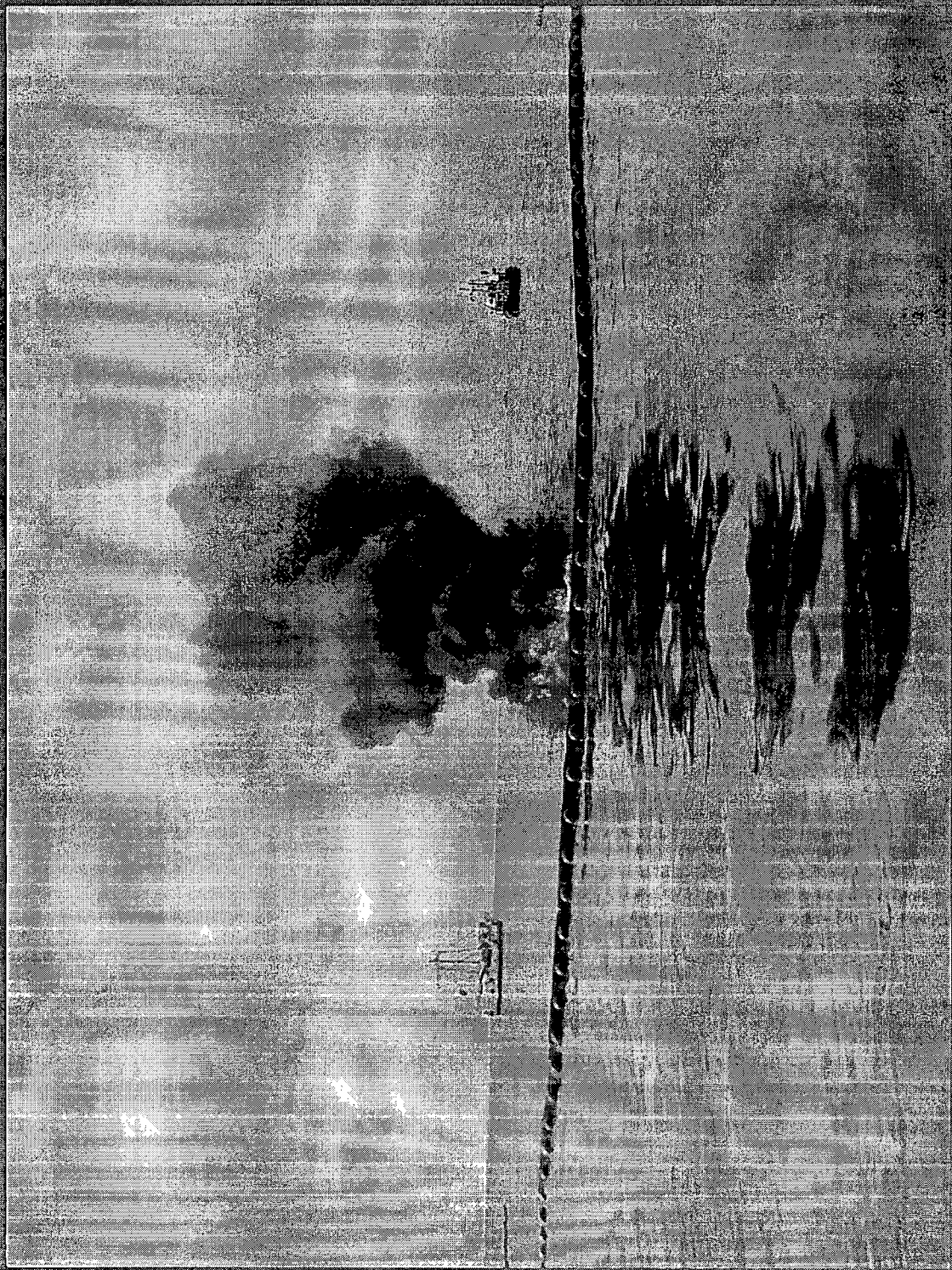


A burn is initiated when approx. *half the boom* is filled with oil





Trawlers continue to move forward *during the burn* to add fuel and prolong the burn as long as possible.





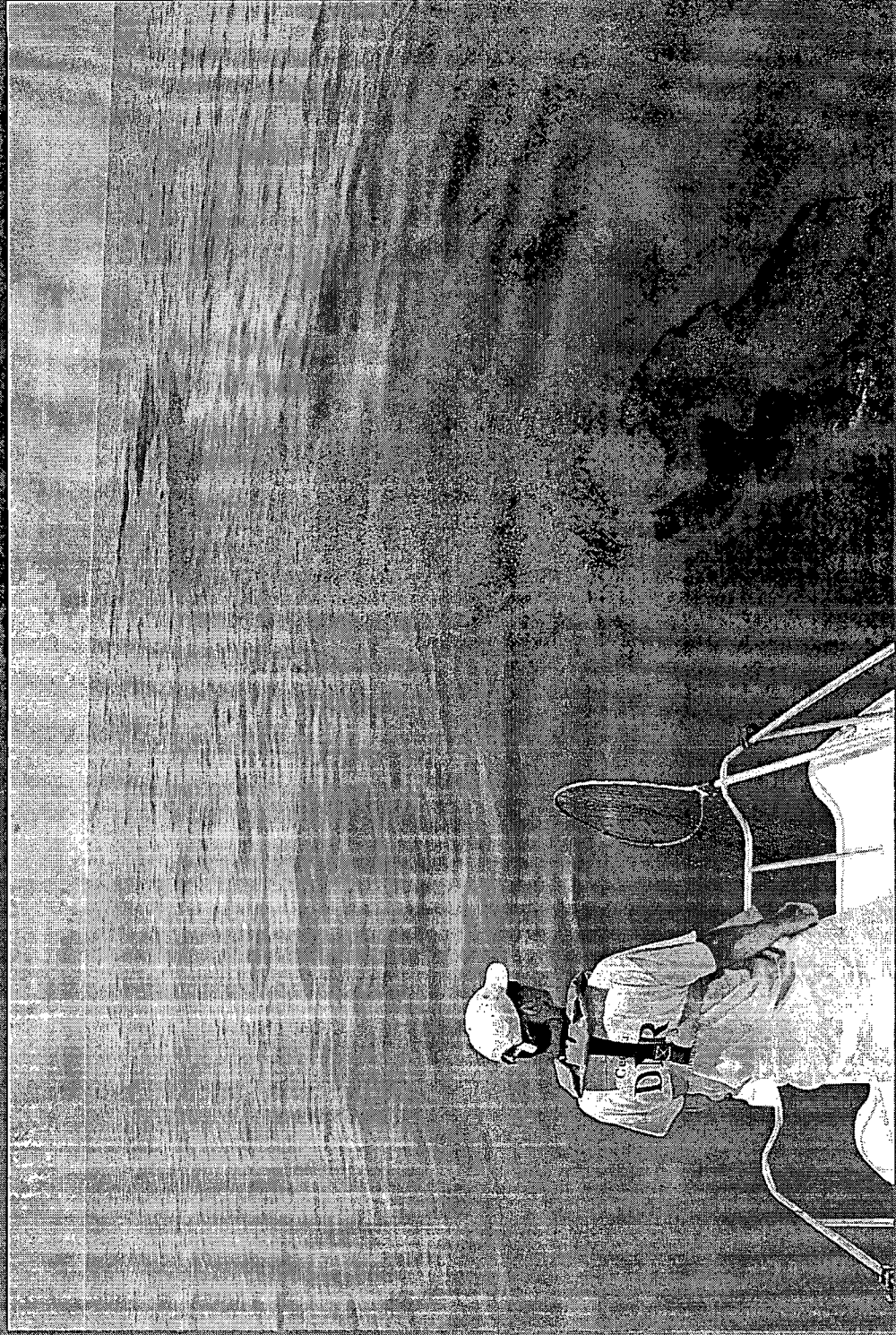
Personnel on the ignition boat *monitor several booms* (pairs of trawlers) simultaneously to determine when the oil is suitable for burning.



Ignition boat

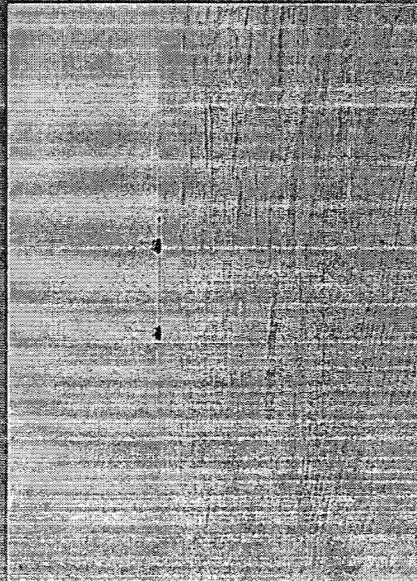


Once ignition boat personnel determine the oil is ready for ignition, a *sea turtle survey* is initiated

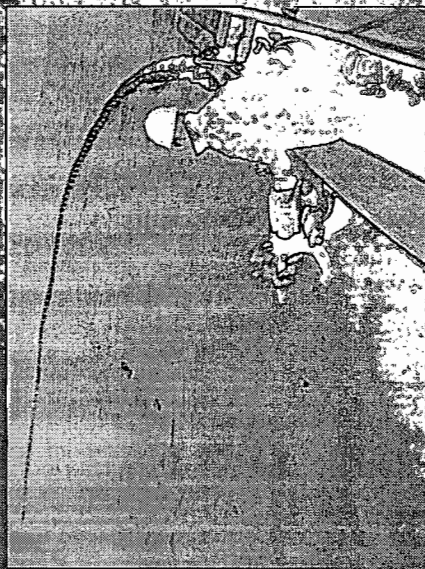




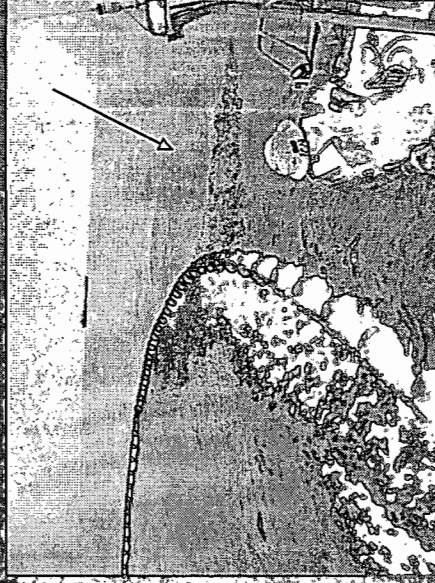
*A sea turtle survey includes monitoring of 3 areas prior to the burn including: 1) the area in front of the trawlers, 2) oil concentrated in the boom, and 3) any oil trailing behind the boom.*



*Oil in front of trawlers-  
The oil in front of the  
trawlers may end up in the  
fire as the trawlers move  
forward*



*Oil concentrated  
in boom-*



*Oil trailing apex of boom-*

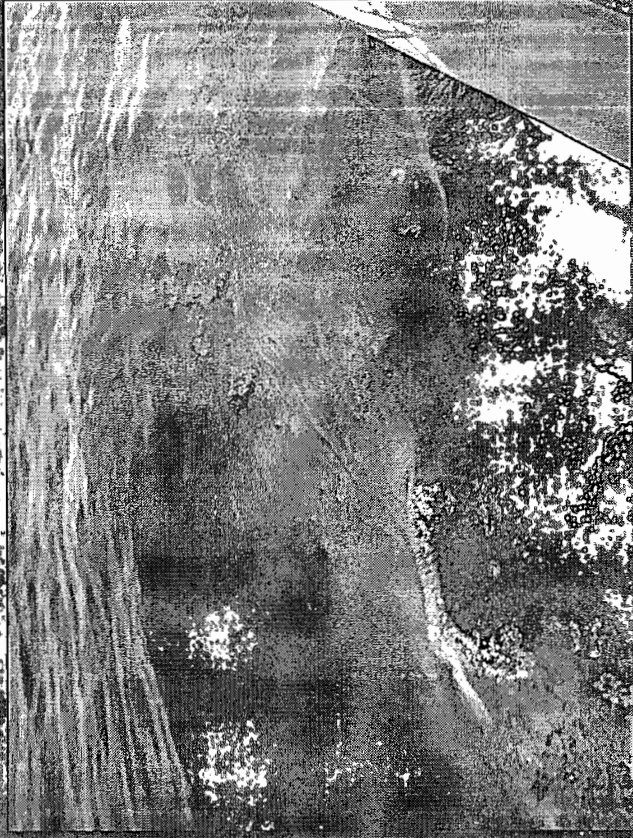
*Fires occasionally jump  
over the apex of the boom if  
the oil is relatively  
continuous and burns  
outside the boom*



Observers will note *the type of oil* encountered during the survey



Heavy (dark black/brown)



Brown to peanut color



Observers will note *the type of oil* encountered during the survey



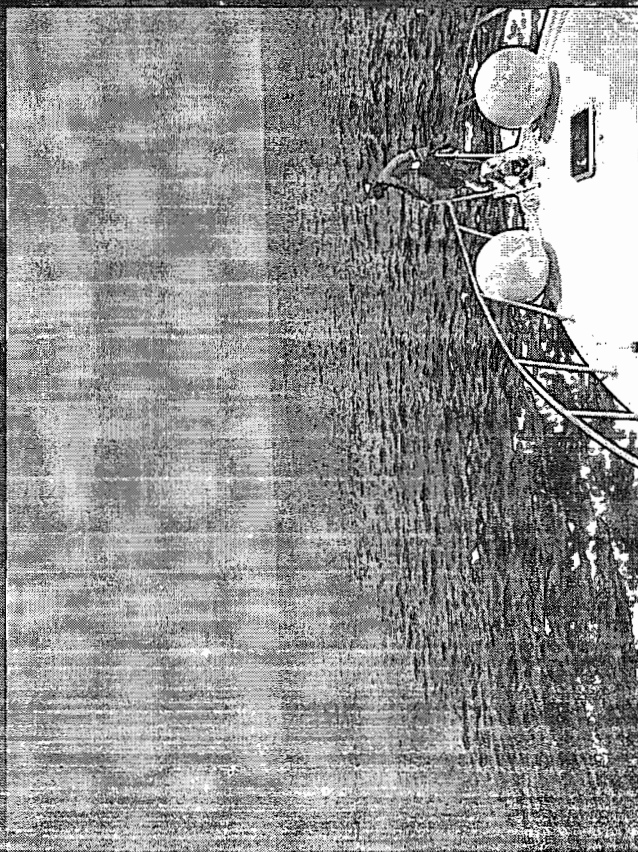
Light (silver/rainbow sheen, metallic brn)



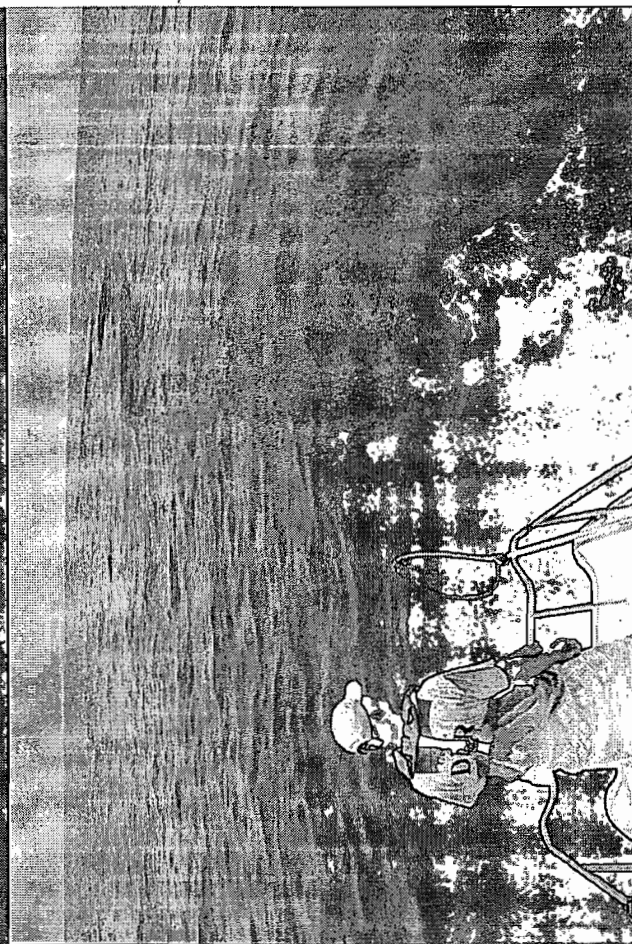
Emulsified (orange)



Observers will note *the type of habitat* encountered during the survey



Sargassum weedline/ No oil



Sargassum weedline/ Oil



Observers will note *the type of habitat* encountered during the survey



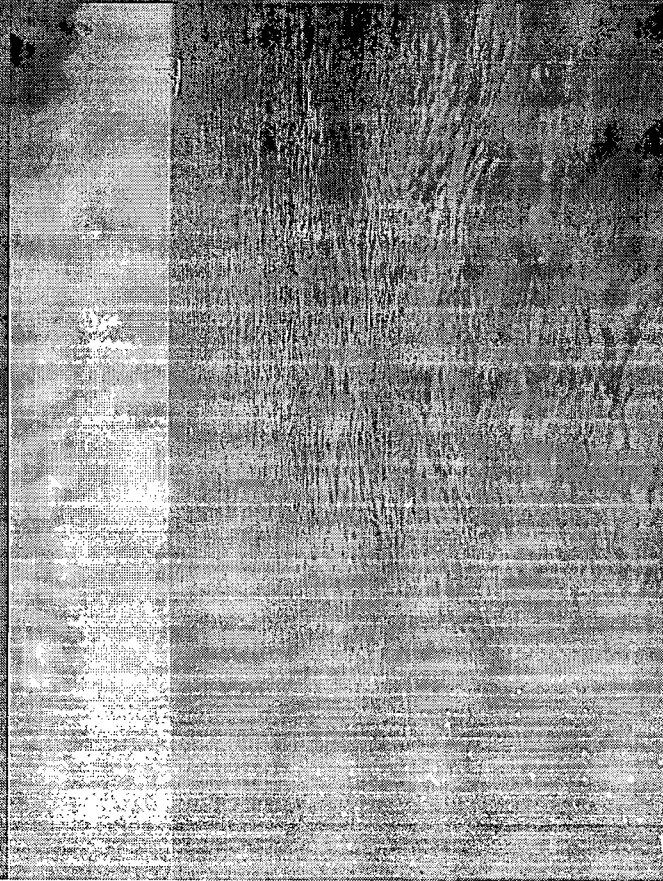
Dispersed Sargassum/ No oil



Dispersed Sargassum /Oil



Observers will note *the type of habitat* encountered during the survey



Heavy continuous oil (no sargassum)

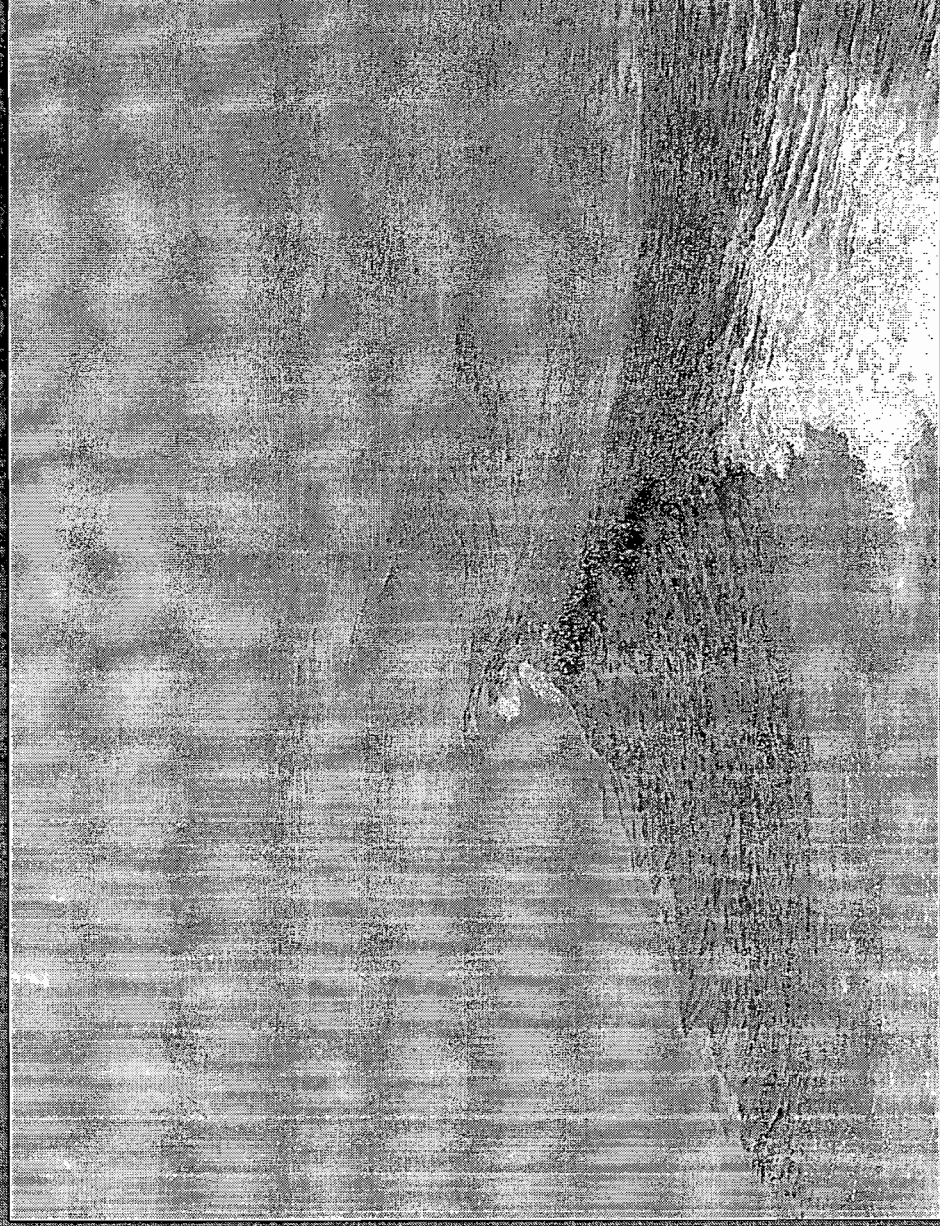
We worked in several of these areas, but I don't have a good photo



Dispersed patches of oil (no sargassum)



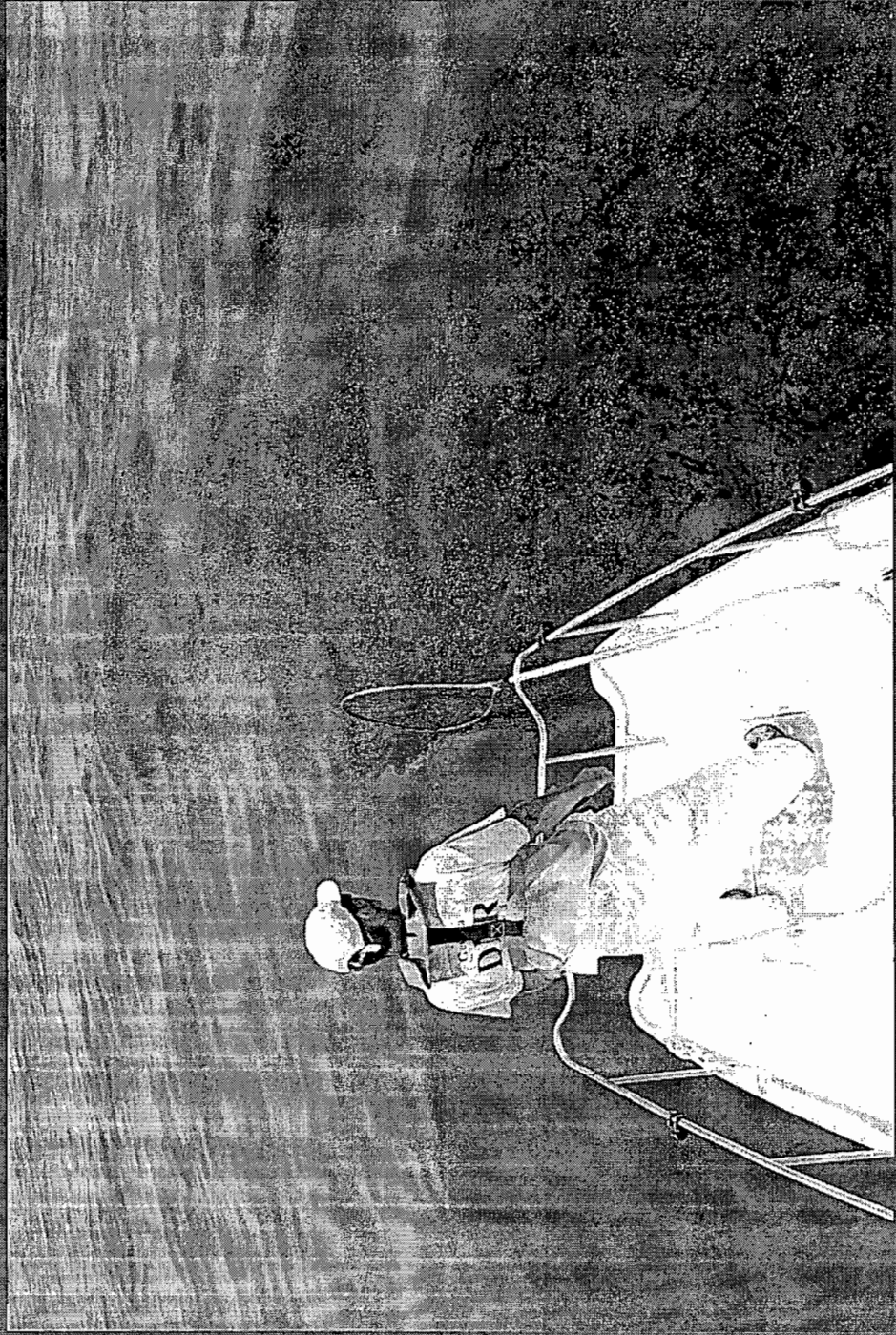
Observers will note *the type of habitat* encountered during the survey



Small dispersed patches of oil (no sargassum). Oil evident in boat wake

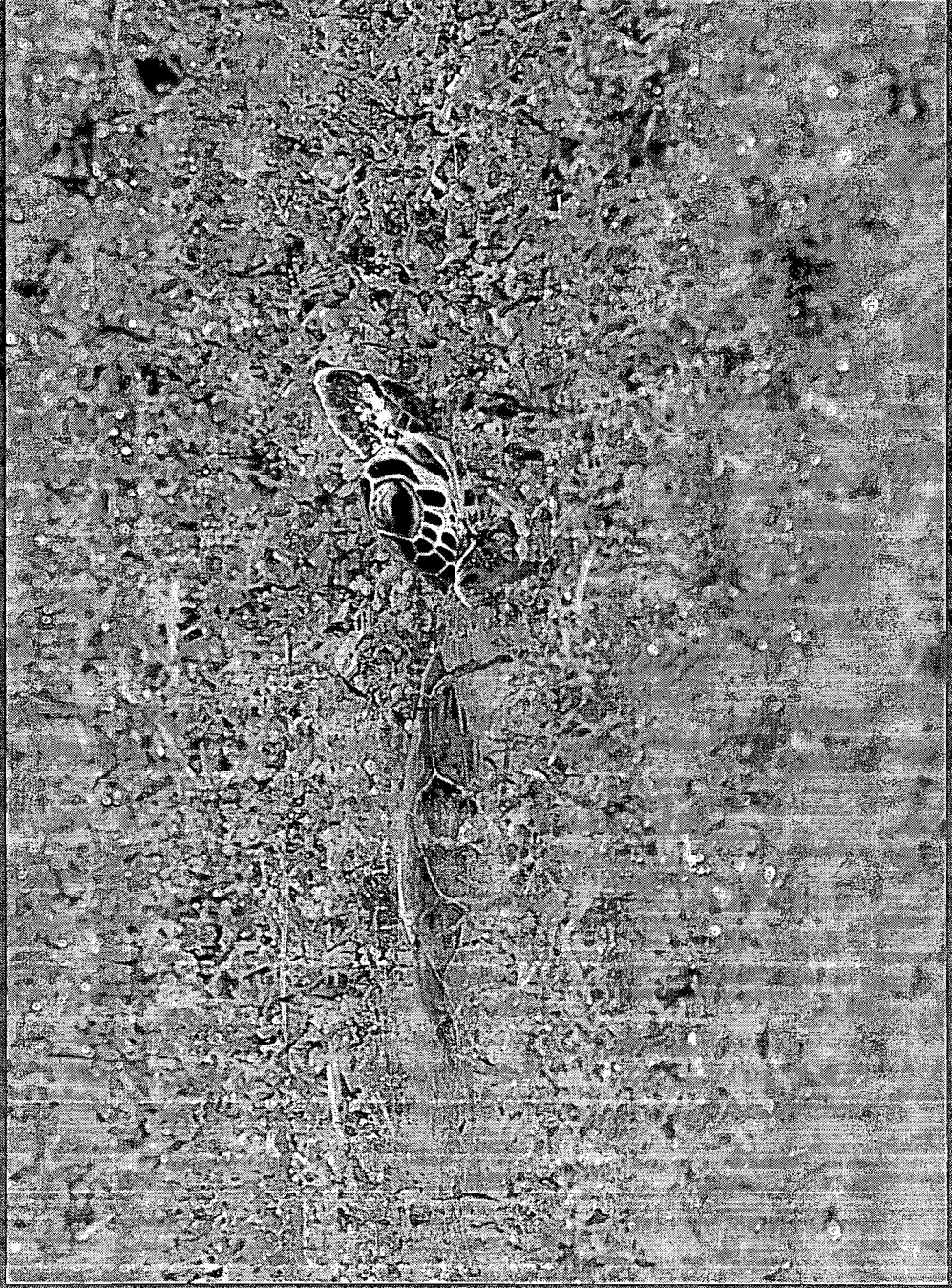


Observers will monitor for the presence of pelagic phase sea turtles from the foredeck of the ignition boat



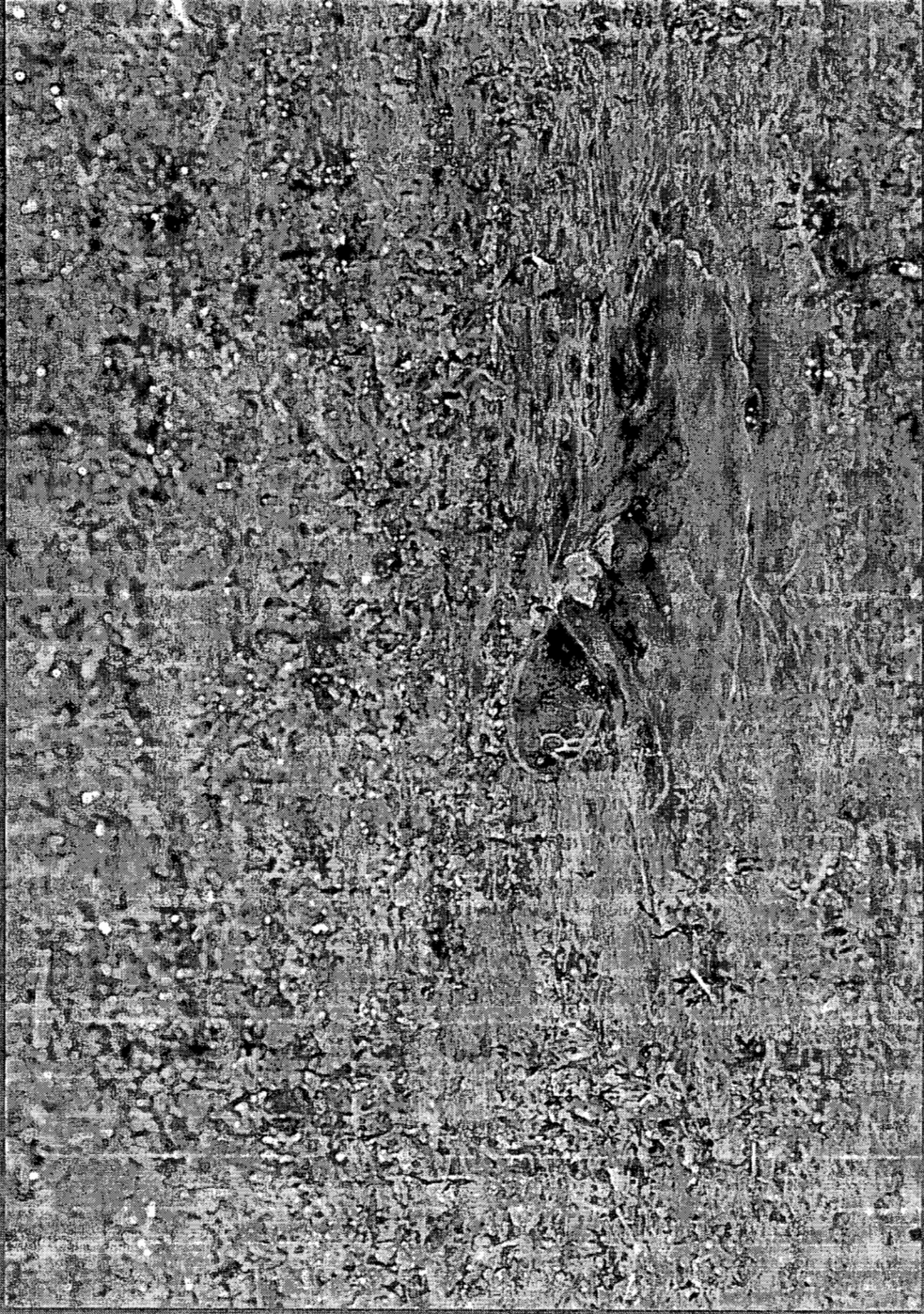


Example of pelagic phase green turtle in *healthy sargassum*  
*weedline*





Example of pelagic phase Kemp's ridley in *healthy*  
*sargassum weedline*



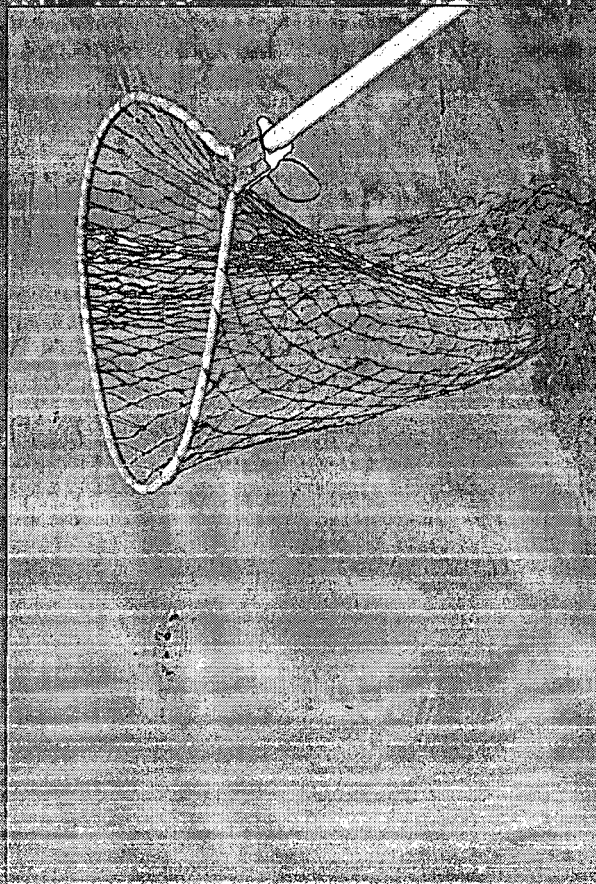


*A sea turtle survey will include the monitoring of 3 areas prior to the burn including: 1) the area in front of the trawlers (700-m), 2) oil concentrated in the boom, and 3) any continuous oil trailing behind the boom.*





# Example of oiled pelagic phase Kemp's ridley sea turtles



In thick oil



In open water near oil

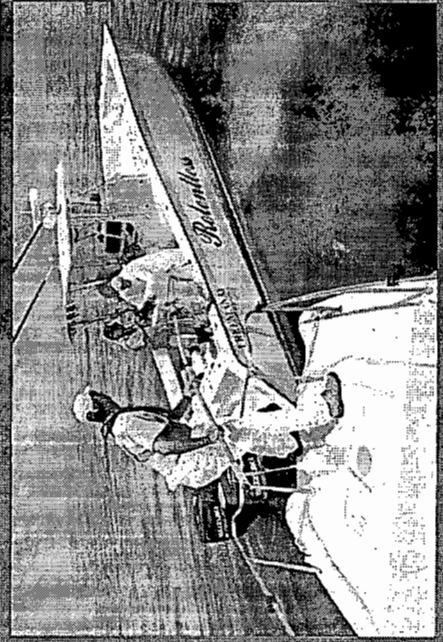
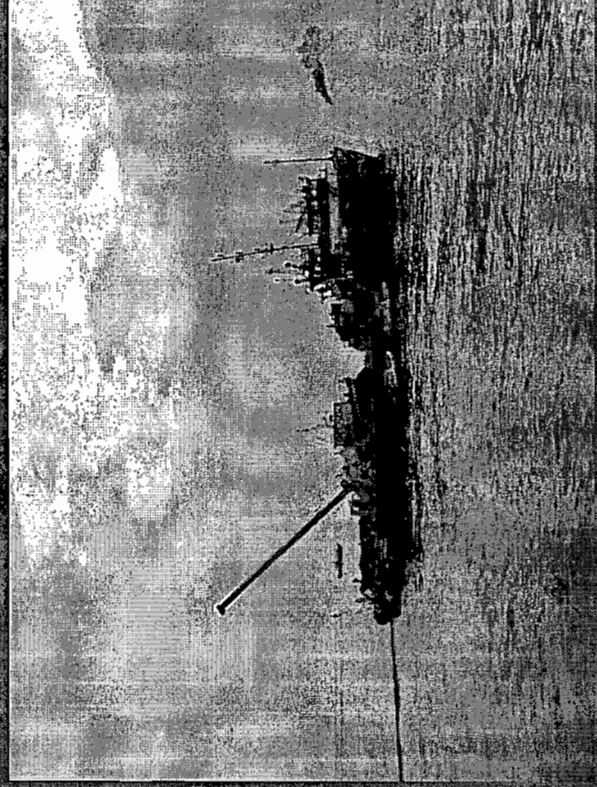
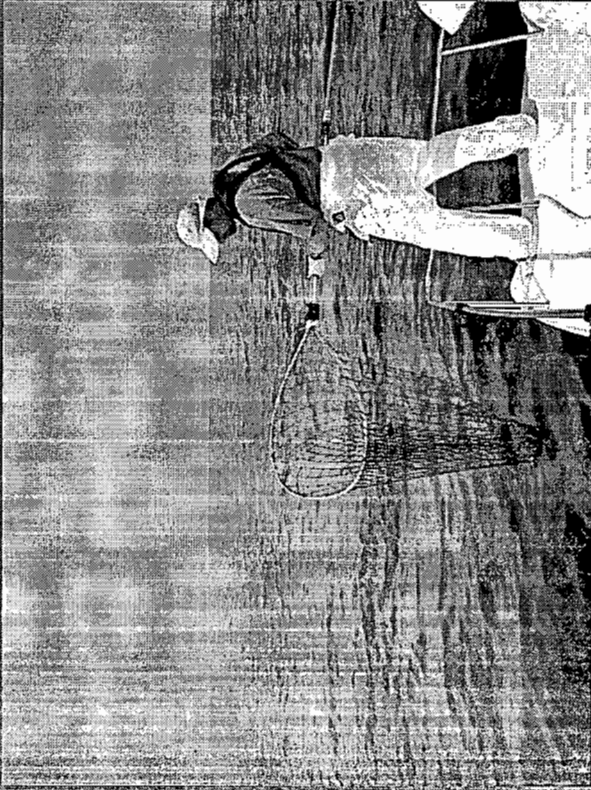


Net capture of a pelagic phase Kemp's ridley near oil





Sea turtles encountered during the survey will be captured with a dip net. A GPS position will be recorded, and the turtle will be transported to the support vessel



Support vessel with 2 ignition boats alongside

Support vessel crew will photograph, swab-sample, and initially clean turtles, and place them in shaded containers for transport. Dead turtles will be iced in coolers.





Once the sea turtle survey is completed and the 3 survey areas are clear of sea turtles, authorized personnel will be given permission to begin ignition.

